PUBLIC ACCOUNTS COMMITTEE (1977-78)

' (SIXTH LOK SABHA)

TWENTY-SIXTH REPORT

COMPUTERISATION IN GOVERNMENT DEPARTMENTS

DEPARTMENT OF ELECTRONICS

[Action taken by Government on the recommendations of the Public Accounts Committee contained in their 221st Report (Fifth Lok Sabha)]

Presented in Lok Sabha on 123 UEU 131.

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CONTENTS

	PAGE-						
Composition of the Public Accounts Committee (1977-78)							
ENTRODUCTION,	(iv)						
CHAPTER I . Report	1						
CHAPTER II . Recommendations/observations which have been accepted by Government	37						
CHAPTER III . Recommendations/observations which the Committee do not desire to pursue in the light of the replies of Government	136						
CHAPTER IV . Recommendations/observations replies to which have not been accepted by the Committee and which require reiteration .	160						
CHAPTER V . Recommendations/observations in respect of which Government have furnished interim replies	161						
APPENDIX . Main Conclusions/Recommendations	173						

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Shri T. R. Ghai—Senior Financial Committee Officer.

^{*}Ceased to be a Member on his appointment as a Minister of State w.e.f. 14-8-77.

INTRODUCTION

- I, the Chairman of the Public Accounts Committee as authorised by the Committee, do present on their behalf this Twenty Sixth Report on the action taken by Government on the recommendations of the Public Accounts Committee contained in their Two Hundred and Twenty First Report (Fifth Lok Sabha) on Computerisation in Government Departments relating to Department of Electronics.
- 2. On 10 August, 1977, an 'Action Taken Sub-Committee' consisting of the following members, was appointed to scrutinise the replies received from Government in pursuance of the recommendations made by the Committee in their earlier Reports:

CHAIRMAN

1. Shri C. M. Stephen

CONVENER

2. Shri Asoke Krishna Dutt

MEMBERS

- 3. Shri Gauri Shankar Rai
- 4. Shri Tulsidas Dasappa
- 5. Shri Kanwar Lal Gupta
- 6. Shri Zawar Hussain
- 7. Shri Vasant Sathe
- 3. The Action Taken Sub-Committee of the Public Accounts Committee (1977-78) considered and adopted this Report at their sitting held on 17th October, 1977. The Report was finally adopted by the Public Accounts Committee (1977-78) on 16 November 1977.
- 4. For facility of reference the conclusions/recommendations of the Committee have been printed in thick type in the body of the Report. For the sake of convenience, the conclusions/recommendations of the Committee have also been appended to the Report in a consoldiated form.
- 5. The Committee place on record their appreciation of the assistance rendered to them in this matter by the Comproller & Auditor General of India.

New Delhi; November 16, 1977 Kartika 25, 1899 (S). C. M. STEPHEN,
Chairman,
Public Accounts Committee.

CHAPTER I

REPORT

- 1.1. This Report of the Committee deals with the action taken by Government on the recommendations of the Committee contained in their 221st Report (Fifth Lok Sabha) on Computerisation in Government Departments, which was presented to the Lok Sabha on 30 April, 1976.
- 1.2. Action Taken Notes on all the 111 recommendations contained in the Report have been received from Government.
- 1.3. The Action Taken Notes on the recommendations of the Committee have been categorised as follows:
 - (i) Recommendations/observations which have been accepted by Government:
 - Sl. Nos. 1—4, 6—11, 13—17, 19—43, 45—51, 53—56; 58—60; 68, 70, 81—83, 85—106 and 108—110.
 - (ii) Recommendations/observations which the Committee do not desire to pursue in the light of the replies of Government:
 - Sl. Nos. 5, 12, 18, 44, 63—65, 73; 78; 79; 107 and 111.
 - (iii) Recommendations/observations replies to which have not been accepted by the Committee and which require reiteration:

NIT.

- (iv) Recommendations/observations in respect of which Government have furnished interim replies:
 - Sl. Nos. 52, 57, 61, 62, 66, 67; 69; 71; 72; 74-77; 80 and 84.
- 1.4. The Committee expect that final replies to those recommendations/observations in respect of which only interim replies have so far been furnished will be made available to them expeditiously after getting them vetted by Audit.
- 1.5. The Committee will now deal with the action taken by Government on their recommendations.

Evaluation of the need for Computerisation

- 1.6. In paragraphs 2.41 to 2.55 of their 221st Report, the Committee had made general observations in regard to the various factors motivating the introduction of computers and other data processing equipments in the country, the need for assessment of user requirements, the policy of computerisation in terms of areas of priority, the urgency of the consideration of social cost, and the need for a centralised machinery charged with the function of spelling out a national policy in regard to computerisation in the country as a whole
- 1.7. The Committee had pointed out that computers were introduced in many cases as mere status symbols and to keep up with the 'Joneses', and not with any clear-cut and calculated assessment of their benefits as an effective management tool. Computerisation had been resorted to on a relatively ad hoc basis without any serious cost-benefit analysis and no assessments were made whatsoever to quantify in concrete terms the benefits expected to accrue from it. The Committee had noted that the systems acquired had not been designed to suit our individual user-requirements, but whatever was readily available with the manufacturers was virtually thrust on this country on account of the sophisticated and alluringly aggressive salesmanship of IBM, a multinational corporation.
- 1.8. The Committee had laid considerable stress on the need for working out the social cost of computerisation—a matter on which adequate attention had not been paid by the Government Departments before resorting to sophisticated machines for traditional labour saving devices. The Committee had desired that Government should invatiably take into account the social cost of computerisation and evolve a principled and positive approach for the selection of areas for computerisation on an overall judgment in the national interest.
- 1.9. The Committee had also noted that there was no clear institutional mechanism within Government for coordinating the computer requirements of different Government Departments/agencies in the country. The Committee had desired that there should be a more integrated and coordinated approach towards the entire question of computerisation in Government Departments.
- 1.10. The Committee envisaged a more active role for the Department of Electronics in scrutinising the requirements of user Ministries for the purchase of computers. The Committee desired that the Department of Electronics should identify precisely the problems.

and areas proposed to be tackled by computerisation and also spell out the benefits which would accrue from computerisation. Finally, the Committee had desired that a more precise policy and objective criteria for computerisation in Government Departments should be evolved by the Department of Electronics so that a national line on this issue could be laid down for principled implementation.

- 1.11. A brief resume of the policy decisions taken by the Department of Electronics, as contained in their Action Taken Notes dated 25 August 1976 on the recommendations contained in paragraphs 2.41 to 2.55 of Committee's 221st Report, is given below:
 - (i) It has been conceded by the Government that the position in the past was largely as mentioned by the Committee above. The Department of Electronics has been designated since August 1975 as the agency in the Government, responsible for clearance of procurement of computers in Government Departments either from indigenous sources or through import, as per changes made in the Business Allocation Rules. The Department of Electronics invariably insists on the user agencies drawing up a detailed justification outlining the areas of applications envisaged as well as detailed justification for the proposed computer facilities. Such a justification provides the basis for determining the relevance of the applications in the Indian context and helps in determining the appropriate facilities which would meet the application needs on a cost-economic basis. The approval for a system is given strictly on the basis of established needs and also takes into account possibilities of using spare capacity available on other systems in Government.
 - (ii) The Department of Electronics are making the user departments increasingly conscious of being able to quantify benefits from using computers for various application areas. The Department will endeavour to carry out studies/field projects to facilitate quantification of benefits accruing from computerisation from time to time.
 - (ifi) The Department of Electronics have set up a Committee to go into the functioning of the computer systems in Government.
 - (iv) The various Government Departments are now being encouraged to determine their own needs for computer applications through studies by their systems personnel.

and where adequate expertise does not exist, they are helped by the Department of Electronics. The 'As Is' programmes of IBM relating to 1401 computers and Unit record equipment and similarly of ICL have been phased out.

- (v) With reference to the future, there is currently a well-defined policy for import of computer systems where the best systems at the lowest prices to meet user needs alone are permitted. The use of indigenous systems is encouraged in situations where they are considered suitable even though they are somewhat higher in prices.
- (vi) The Department of Electronics are endeavouring to determine the appropriateness of computerisation to various application areas and processes, taking into account the techno-economic as well as social aspects. The Department have identified the following priority areas for utilisation sectors of national computers: vital (Defence). applications, applications export-oriented (technical studies, large scale statistical analysis, production planning etc.) in nationally important sectors like agriculture, atomic energy, space, power, oil, coal, steel and transportation. Research and Development, advanced computer training: production-oriented (process control applications that can be activities) and commercial demonstrated unambiguously to lead to efficient management where automation 'per se' is not the objective. The last application area is examined more critically than normal to avoid pure Tabour-saving office automation.
- (vii) The question of regulation of introduction of computers above a certain value in the private sector that may be the distribution of the private sector that may be the Government.
- (viii) The Electronics Commission has laid down policies with regard to various aspects of computer technology such as imports, industrial licensing, priority areas for use of computers, technology development, software exports, and the manufacturing programmes of foreign companies.
- 1.12. The following are some of the significant policy decisions and actions taken in this regard by the Electronics Commission:
 - (i) The Department of Electronics have been made responsible as the nodal Ministry of Government for coordinating the

- requirement of all users in the country relating to electronic data processing equipment and all matters concerning computer-based information systems and technology.
- (ii) Policies and administrative procedures for import of computers above the value of Rs. 5 lakhs have been laid down.
- (iii) The configurations of computer systems for priority sectors such as, Defence, Oil, Agriculture, Steel, Atomic Energy, Planning, Industrial Production and Regional Computer Centres for specific applications as indicated by the users have been defined and clearance for import given.
- (iv) Programmes for the import of computers for export of software on the basis of guarantees, and by Indian nationals returning from residing abroad, have been implemented.
- (v) Action regarding issue of industrial licences for programmable calculators, minicomputer peripherals, microprocessor-based tele-communication systems and cash registers, and limited industrial licences for minicomputers, has been taken; this is continuing process.
- (vi) Supply of computers by foreign computer companies operating here on the basis of refurbishing of used machines imported on an 'AS IS' basis, has been terminated.
- (vii) The programmes of foreign computer companies operating in India have been examined under Foreign Exchange Regulation Act and recommendations made for reduction of foreign equity to 40 per cent or discontinuance of all their current activities classified as trading, marketing, operation of data centres etc.
- (viii) Technology development contracts amounting in money terms to about Rs. 3 crores for the development of computer hardware and software, have been given to public sector companies.
 - (ix) With assistance from United Nations Development Programme, a National Centre for Software Development and Computing Techniques has been set up at the Tata Institute of Fundamental Research, Bombay. A National Informatics Centre has been approved for implementation at New Delhi. A Regional Computer Centre at Calcutta is being set up.

- 1.13. In para 2.46 of their Report, the Committee had expressed their doubts about the justification for the acquisition of a computer by the Registrar General of India (Census) for what appeared to them to be a one-time application. The Committee felt that the work could have been executed through a centralised computer agency such as the Government Computer Centre.
- 1.14. In their Action Taken Note dated the 25 August 1976, the Department of Electronics have stated that in 1965 when the proposal for acquiring a computer was mooted, there was no centralised computer agency available through which the work could be got executed. They have stated that the census operations call for considerable data processing activity immediately following the enumerations which are carried out once in a decade. However, the volume of data, generated out of the census operations would perhaps be the largest single collection of data on a national basis which can support a very wide range of planning applications on a national, state and regional basis and on other aspects. The Department of Electronics have, in their reply, also pointed out that not much use has been made on a continuing basis of the vast collection of data which is available with the Registrar General of India (Census). With the setting up of National Informatics Centre at Delhi, which will build up an information base in social sciences, it is anticipated that increasing use of the data will be made by Government Departments.
- 1.15. The Department of Electronics have also stated that the spare capacity in the Computer System of the Registrar General of Census would also be available for the Government Departments. They have assured that the Committee set up by the Department of Electronics to go into the functioning of the computer systems in Government would also make recommendations on the nature of facilities to be set up for census operations and census data management.
- 1.16. The Committee appreciate the promptness with which the Department of Electronics have taken action on the various recommendations/observations made by the Committee. The Committee would like to commend the various steps taken by the Department, in the light of the Committee's observations, to streamline the procedure for indenting and procurement of computers in the overall national interest.
- 1.17. The Committee note with satisfaction that guidelines for determining areas of priority in usage of computers whilst clearing various proposals for their imports have been adumbrated by the

Department of Electronics and a policy paper in this regard will be drawn up by the Department with the approval of the Electronics Commission soon.

- 1.18. The Committee have noted the assurances given by the Department of Electronics that endeavour will be made to carry out studies/field projects with regard to quantification of benefits accruing from computers from time to time. Now that an Inter-Ministerial committee has been constituted to study, inter alia, this particular matter in depth, they hope that it would be possible for the Department to quantify in concrete terms the benefits accuring to the major users of the computers.
- 1.19. The Committee have noted the observation of the Department of Electronics that the question of regulation of introduction of computers above a certain value in the private sector that may he obtained through indigenous sources is being studied by the Government. The Committee would like these studies to be expedited and clear policy laid down and published for the guidance of all concerned.
- 1.20. The Committee note that the inter-ministerial committee. which has been set up by the Department of Electronics, would also make recommendations on the nature of facilities to be set up for census operations and census data management. However, they cannot help expressing their deep concern that not much use has so far been made about the vast data that have already been collected with the help of the computer in the office of the Registrar General of India (Census). The Committee would like the Government to take conclusive action in consultation with other concerned authorities to put to effective use the voluminous data collected by the Registrar General of Census. They feel that it is of the utmost importance not only to collate the information but also to publicise it for the benefit of researchers, social scientists and universities. The Department of Electronics should also determine we'll in advance the nature and extent of computerisation that would be necessary for the Census organisation before the commencement of the next Census in 1981 so that most suitable and economic arrangements could be made.

ACQUISITION OF COMPUTERS

1.21. Dealing with the question of acquisition of computers dealt with in paragraphs 3.1 to 3.89 of the Report, the Committee had revealed certain distressing features in regard to purchase procedure, economics bring via a vis outright purchase and the reason-

ableness of the terms and conditions of Agreement with IBMICL, which are enumerated below:

- (i) The Committee had noted that except for a few instances, almost all Departments had purchased computers data processing equipments directly and not procured them through the Director General of Supplies and Disposals, which they should have, according to the General Financial Rules and the provisions of the Manual of the Director-General of Supplies and Disposals.
- (ii) Many Government Departments had procured computers data processing equipments without floating any tenders on the plea that such items were of a proprietory nature.
- (iii) The Committee had also found instances where Ministries had resorted to hiring of computers data processing equipments by direct negotiations with the suppliers.
- (iv) In justification of the rationale for hiring of computers; data processing equipments, some of the Ministries had adduced the high capital investment on outright purchases and budgetary restrictions as the raison d'etre for such hiring transactions. The Committee had asked the Government to take concerted measures so that all constraints in the way of a rational decision about the purchase, instead of hire, of computers were eased out in the country's interest. In this context, the Committee had emphasised that computers and other sophisticated machines should be pressed into service only where these were required in the interest of scientific advancement or technological and production gain but never merely as a labour saving device. As on adjunct to this recommendation, the Committee had also recommended that where it was found necessary to purchase the equipment outright, it should be procured from indigenous firms But where any equipment had to be imported, tender; should be invited from well-known and reliable suppliers of proven standing. The Committee had laid particular stress on the scrutiny of the terms of hire with the help of the Department of Electronics and the Ministry of Finance (Cost Accounts Branch) so as to procure the most competitive rates.
- (v) From the information furnished to them, the Committee had noted that an almost total reliance had been placed

on the western countries for the procurement of computers data processing equipments and the markets in the socialist countries had not been adequately explored. The Committee had recommended that this aspect of the matter should be gone into by the Department of Electronics while processing the requisitions for procurement of such computers data processing equipments for Government Departments as were not manufactured within the country.

- (vi) The Committee F d noticed serious loopholes in the matter of processing the requests of the Government Departments/Ministries|Organisations for acquisition of computers|data processing equipments, etc. The more glaring among them were the lack of any clear-cut guidelines for determining the necessity or otherwise of computers, nonutilisation of the facilities in a common computer centre. improper examination of the requirements and lack of critical examination of the reasonableness of the terms of Agreement for purchaselhire of computers offered by IBM/ICL. As a result, the sowerful multinationals were able to cash in on the complacency and apathy on the part of the user Government Departments to farm out the outmoded and used machines which were only spruced up and refurbished and hired out at a fabulous margin of profits.
 - (vii) The Committee had stressed the importance of developing an expertise for servicing computers and data processing equipments so that reliance on foreign suppliers could be obviated and considerable saving of foreign exchange could be effected. In this context, the Committee had also underscored the need for developing capability in the country for manufacturing data processing and other peripheral and supporting equipments.
 - (viii) The Committee had emptomised their observations in the following words:
 - "Government should issue clear guidelines to the effect that all future requirements for computers, data processing equipment, etc., would first be got examined in the Department of Electronics with reference to the criteria laid down. Where it is considered absolutely essential in public interest to go in for computers, data processing equipment, etc., these should be preferably procured from the public sector units and failing that from indi-

genous firms. Where computers, data processing equipments, etc., are to be purchased or hired from a multinational, this may only be done centrally by the Department of Electronics who may be assisted suitably by the Cost Accounts Branch of the Ministry of Finance."

- 1.22. In their Action Taken Notes dated the 25 August, 1976 the Department of Electronics have stated that in terms of a Cabinet decision of 4 December, 1975, import of all computers costing more than Rs. 5 lakhs, will be approved by a high level Approval Committee consisting of the Chairman, Electronics Commission, a Member of the Electronics Commission, Secretary, Department of Economic Affairs and the Secretary of the user Department concerned. As a prelude to such approval, the Department of Electronics will be the agency responsible for drawing up the system specifications in consultation with the user on the basis of the user's justification. Under this policy, the earlier procedure of procurement through DGS&D has been discontinued.
- 1.23. The Department of Electronics have stated that acquisition of computers on the plea of being proprietory items should be exceptional and such exceptions can be for reasons of very specialised application areas. As a general rule, procurement of computers is now being done on a competitive tender basis only.
- 1.24. As regards the question of hiring vis-a-vis outright purchase, the Department of Electronics have stated that as per the decision of the Electronics Commission in 1971 procurement of imported computer system will be through outright purchase only and not hire. The Department will advise user Departments on the basis and terms of such hire if services of data processing equipments costing more than 5 lakhs are to be obtained on the basis of hire in preference to outright purchases. In terms of Foreign Exchange Regulation Act guidelines applicable to foreign equity companies in India, companies operating with higher than 40 per cent, equity would not be permitted to engage in internal trading and commercial activities (such as hiring). Thus, activity of hiring of data processing machines will be precluded from the activities of IBM and ICL under FERA unless they restructure the company's equity status to bring the foreign equity to below 40 per cent. The Department has also stated that a study on generalised basis on the rationale for purchase/hire of systems taking into account aspects such as manufacturers rates of rental and sale prices, purchasers' rate of return on investment, nature and useful duration of applications is being carried out. Broad guidelines on the subject will be evolved. A critical review of the use to which the existing computers, data

processing equipment etc. are put to in Government has been entrusted to a specialist committee and depending on the findings of the committee, appropriate action will be taken.

- 1.25. The Department of Electronics have also informed the Committee that negotiations for conversion of hiring options into purchase have been carried out with IBM and ICL. These options will be given effect to whilst approving the future programmes of these two companies under the Foreign Exchange Regulation Act. As a matter of policy the computers on hire are being phased out.
- 1.26. On the question of exclusive reliance on western countries for computers/data processing equipment, the Department of Electronics have stated that, as a matter of standard procedure, all invitations to tender for supply of a computer through import are sent to all known computer suppliers represented in the country. This includes computer manufacturers (or their agents in India) from USSR and other socialist countries also.
- 1.27. As to the question of plugging the loopholes which the Committee had pointed out in para 3.95 of their 221st Report, the Department of Electronics have stated that the procurement of computers is approved on the basis of guidelines for determining the necessity or otherwise for which detailed justifications are required. The requirements are also to be spelt out in sufficient details for a proper evaluation of the proposed system configuration to be done. Quotations from a large number of computer manufacturers are obtained. The terms of agreement for purchase and for installation, warranty etc., are stipulated in contracts. The Department have assured that examples of the type quoted by the Public Accounts Committee will not recur.
- 1.28. As to the question of scrutiny of the terms of hire, the Department of Electronics have stated that the Inter-Ministerial Working Group on Computers has held negotiations during 1976 with IBM with regard to conversion of hire agreements with users into outright sale. IBM have proposed certain basis for termination of hire which is under consideration.
- 1.29. On the question of servicing of computers the Department of Electronics have stated that with the setting up of the Computer Maintenance Corporation (a public sector undertaking under the Department of Electronics) a close watch will be kept on the procedures for servicing and for acquisition of spare parts and to ensure that costs of spare parts are reasonable.

- 1.30. The Department have assured that all established user requirements are to be met by computers available through indigenous manufacturing programmes. Import of computers will be resorted to only if the indigenously available computers will not be able to meet the requirements of applications as are considered of high priority and inescapable. Guidelines with regard to import of computers have been issued to all Ministries/Departments on 2 March. 1976
- 1.31. The Committee are glad that the Department of Electronics are by and large in agreement with the findings of the Committee in regard to the loopholes which were prevalent in the system of hiring, purchase and utilisation of computers and other data processing equipment, as high-lighted in waragraph 3.95 of the Report. The Committee note that, on the basis of the Cabinet decision, policy guidelines for import of computers have been issued. According to these guidelines, each user will outline the application for which a computer system has to be obtained through import and the Department of Electronics will scrucinise such applications in terms of national priorities as laid down by the Electronics Commission from time to time. After the need for the import of computer system with a certain functional configuration has been established, this Department will obtain competitive sealed tenders from manufactures' agents. The Committee feel that this is a step in the right direction and will eliminate unjustifiable proliferation of computers/data processing equipment by the user Department. The Committee desire that the guidelines should also be brought to the notice of all the user Departments
- 1.32. The Committee would like that the Department of Electromics should include in their Annual Reports the details of all the proposals which have been cleared by them for the import of computers data processing equipments costing Rs. 5 lakks and over.
- 1.33. the Committee note that the Department of Electronics propose to conduct a study on a generalised basis on the rationale for purchase hire of systems taking into account such aspects as manufacturers, rates of rental and sale prices, purchasers' rate of return on investment, etc. and broad guidelines on the subject will be evolved. The Committee would like to be apprised of the details and results of such a study.
- 1.34. As regards the scrutiny of the terms of hire with IBM and ICL, the Committee have been informed that the Inter-Ministerial Working Group on Computers has held negotiations during 1976 with IBM with regard to conversion of hire agreements with users

into outright sale. The Committee would like to know the details of the agreements that have been reached with IBM as also ICL in regard to the computers which have been hired out to the user Departments.

1.35. It is a matter of satisfaction that the Department of Electronics have assured to the Committee that examples of the type quoted by the Public Accounts Committee will not recur.

Extent of utilisation of Computers

1.36. Dealing with the question of extent of utilisation of computers, areas and applications computerized so far, savings effected in wages and quantification of economics of computerisation, and the result achieved after computerisation, the Committee in paragraphs 4.1 to 4.40 of their 221st Report had recommended that an Expert Committee should be set up by the Ministry of Finance to examine in depth the justification for the computers, data processing machines etc. in use in each of the Government Departments, organisations etc. and to suggest concrete measures to bring about efficient working, rationalisation and economy. The Committee had also suggested that the Export Committee should evolve guidelines and check lists in order to ensure that at least in future the requests for acquisition of computers, data processing machines etc. could be examined critically in the light of the guidelines before decisions were taken. The necessity of having a perspective plan to ensure the optimum utilisation of computers, data processing machines etc. on a long term basis was also stressed by the Committee.

1.37. In this context, the Committee suggested that there should be a built-in arrangement in the department, organisation etc. for periodical evaluation of the actual use made of the computers, data processing machines etc. with reference to the hypotheses and parametres on the basis of which they had been acquired. Such a review should be carried out at least once a year. The continued use of computers should be determined with reference to the cost benefit factor.

1.38. Referring to the decision of the Department of Electronics to set up Computer Centres in metropolitan, as well as regional sites, the Committee had opined that there should be a meaningful coordination between the computer centres and the users, particularly those belonging to Government and the public sector. The Committee stressed that there should be highly significant computer study and analysis of our exports and imports with reference, parti-

cularly, to the efficiency of incentives given to increase exports of manufactured products and to export goods to new markets, and also the inter-related subject of disincentives for imports, so that the country could accelerate the achievement of a self-reliant economy. Studies should also be made to evaluate the impact of various economic and fiscal measures on the development of the economy in various sectors. The need for developing an information system in various fields such as coal, steel, manpower planning etc. was, therefore, stressed by the Committee in their Report.

- 1.39. In order to avoid multiplicity of studies conducted by different organisations without any inter-related coordination, the Committee had stressed in their Report that there should be meaningful coordination between the user departments and the Department of Electronics/manufacturing units so that a computer system programme could be properly designed to serve the public interest in the best possible way and to avoid the waste of the country's talent and treasure.
- 1.40. In their Action Taken Notes dated the 25th August, 1976, the Department of Electronics have stated that an Expert Committee has been constituted with broad terms of reference which have been finalised on the basis of the various aspects highlighted by the Public Accounts Committee. The terms of reference of the Expert Committee would be—
 - (a) to collect detailed information concerning the installation and utilisation of Electronic Data processing equipment acquired by various Government Ministries/Departments;
 - (b) to examine in depth the justification of computers, data processing machines etc. in use in each of the Government Departments/Organisation etc. and suggest concrete measures to bring about efficient working, rationalisation and economy;
 - (c) to study the utilisation of Electronic Data Processing machines etc. hired or purchased by various Government Departments/Organisations and to assess the benefits obtained out of these machines vis-a-vis the heavy expenditure (manpower, equipment etc.) incurred thereon.
 - (d) to report on the extent to which various Government Departments and Organisations have been able to put Electronic Data Processing facilities to worthwhile and adequate use;

- (e) to suggest improvement in Electronics Data Processing based information gathering processing disseminating methodologies in Government so as to improve decision making, effect overall economies and increase efficiencies;
- (f) to evolve guidelines and check lists in order to ensure that at least in future the request for acquisition of conputers, data processing machines etc. would be examined critically in the light of the guidelines before decision are taken; and
- (g) to lay down level below which, if the load of work goes down; the computer is to be given up and the work got done through the services of Computer Centre.
- 1.41. The Expert Committee would *inter alia* evolve guidelines and check lists in order to ensure that in future the requests for requisition of computers/data processing equipment are examined critically.
- 1.42. The Department of Electronics have also stated that endeavours are being made to have primary Systems Groups established or identified in the various user organisations for drawing up such long terms plans and for effective follow-up of computerisation programmes. Aspects of training of the staff and provision of other infra-structure to support computer installations are being looked into. This is being done with a view to ensuring a planned development and optimum utilisation of data processing machines and also for the purpose of planning and licensing of indigenous production programmes in the country.
- 1.43. It has been stated that the Department of Electronics are laying down guidelines for various sectors and all the Government departments, to obtain information regarding the applications and the utilisation of currently installed computer systems. The Expert Committee which has been set up would carry out a first analysis, with regard to installations in Government and a procedure for annual review would also be laid down.
- 1.44. In order to ensure that there is meaningful coordination between the user departments and the Department of Electronics/manufacturing units, the Regional Computer Centre at Calcutta has been registered as a non-profit making Scientific Society which would serve the needs of various users in the Calcutta Region primarily for applications in Regional Planning, State Level Planning, Management of Industries, Coal India Information System, Produc-

tion Oriented Applications, Research and Development etc. A number of sub-systems are currently under development, in preparation for the setting up of the National Informations Centre at Delhi. The Department of Electronics have stated that the project documents setting down the objectives and programme of the centre have been approved by the UNDP who would be providing the equipment and training support for the programme. The National Centre for Software Development and Computing Techniques at Bombay has been set up with UNDP support and the Centre has been developing software and techniques. Major facilities have also been set up for software development for export at Delhi, Baroda, Bombay and Hyderabad.

- 1.45. In order to ensure closer coordination between the Department of Electronics and the User Departments discussion are being held with the systems groups responsible for planning and implementation of computer based information and decision making systems in various Ministries and Departments. Both the short-term and long-term requirements are jointly analysed and drawn up through such discussions. The Department of Electronics has been promoting the setting up of appropriate systems groups in the user areas with which it could interact thereafter on a continuing basis. Constant dialogue is also being maintained with the users consultants and the manufacturing organisations through the aegis of the Technology Development Council Working Group on computers to ensure that appropriate promotional action was taken for the development of hardware and software specific to our national needs.
- 1.46. The Committee note with satisfaction that Government have constituted an Expert Committee with broad terms of reference to collect detailed information concerning installation and utilisation of electronic data processing equipment acquired by various Government departments and to suggest concrete measures to bring about efficient working, rationalisation and economy. As regards the delay in the setting up of the expert body, the Committee note the Government's point of view that "since very many aspect of computerisation in Government departments were being investigated in considerable depth and a large amount of evidence was being collected by the Public Accounts Committee, Government considered it more advisable to await the conclusion of the investigation and the findings by the Public Accounts Committee so that any indepth study by the Export Committee may be more purposeful in terms of the findings of the Public Accounts Committee". The Committee however, have not been informed about the time by which the Expert Committee would complete its work and submit its report. The Committee would like to be informed about the findings of the

Export Committee and the action taken in pursuance thereof in due course.

- 1.47. The Committee would like Government to lay down early the parametres and guidelines for assessing the extent to which computers/data processing equipment system have proved beneficial with reference to cost, labour displacement etc., so that the review could be carried out annually and necessary follow-up action taken
- 1.48. The Committee suggest that the highlights of this review should also be suitably incorporated not only in the Annual Reports of the Ministries/Departments/Government Organisations concerned, but also in a consolidated manner in the Annual Report of the Department of Electronics.
- 1.49. The Committee attach considerable importance to the training of staff and the provision of other infrastructure to support computer installations. The Committee would like to be informed about the details that are being worked out by the Department of Electronics to ensure these objectives and the actual progress made in imparting training.
- 1.50. The Committee note that the Regional Computer Centre at Calcutta would serve the needs of various users in the Calcutta region for various applications related to industry, trade and production. The Committee also note that Government contemplate to set up a National Informatics Centre at Delhi. The Committee would like to be apprised about the details of the working of the proposed Centres with particular reference to cost aspects, methodologies, facilities to be provided etc. utilisation of capacity in terms of percentage. They would also like to be apprised about the action taken and results achieved in pursuance of discussions being held with the Systems Groups responsible for planning and implementation of computer based information and decision making systems in various Ministries and Departments.

Data Security

1.51. In paragraphs 5.35 to 5.42 of their 221st Report, the Committee drew the pointed attention of the Government to the data-security aspect involved in computerisation. The Committee stated that in view of the technological advances, sophisticated instruments can remotely control information stored by computers, thereby endangering the security of the data collected by different Government departments. The Committee stressed that the possibilities of leak-

age of information and of espionage or intelligence gathering without the knowledge of other people cannot be entirely ruled out. To counteract such possibilities, the Committee suggested that the department should take adequate steps to screen the persons employed on operating computers. A careful watch had to be kept in regard to computers which were hired from multi-nationals.

- 1.52. The Committee observed that no coordinated action had been taken by the Ministry of Home Affairs, which was the Central agency for looking after the security aspects of all Government departments, in the matter of ensuring security of data especially in the more sensitive departments.
- 1.53. While welcoming the proposal of the Department of Electronics to constitute a panel of specialists to deal with the problem of ensuring security of information, the Committee suggested that the Government might consider installation of technological devices on the imported computer systems working in the key Government Departments so that no risks whatsoever were taken with data-security. In this context, the Committee also suggested that a cell should also be set up by the Department of Electronics to provide computer users and indigenous computer manufacturers with information and guidance about security measures.
- 1.54. In their action taken notes dated the 25th August, 1976, the Department of Electronics have assured the Committee that the Government are aware of the problems involved in data security arising out of computerisation. A security drive is being launched to bring about an awareness of such problems. It has also been stated that an inter-Ministerial Standing Committee has been constituted to collect information regarding the existing procedures and system of ensuring data security in departments/organisations using computers, etc. and to examine, inter alia, the adequacy of the measures existing in the departments/organisations etc. for ensuring security of information etc. The Inter-Ministerial Committee would also carefully consider all the suggestions made by the Public Accounts Committee in their Report.
- 1.55. As to the observations of the Committee that there was no coordinated thinking from the security angle on the part of the central agency of the Government, viz. the Ministry of Home Affairs, the Committee have been informed that "there are no specific instructions issued by the Ministry of Home Affairs on data security in the case of computers installed in various Government Ministries and Departments. However, the Departmental security instructions issued by the Ministry of Home Affairs 'mutatis mutandis' apply to

classified information stored in computers....It has been enjoined in these instructions that the Secretary of each Ministry or the Head of each Department is responsible for security in his office."

- 1.56. The Department of Electronics have further stated that in accordance with these instructions, the Intelligence Bureau will act in an advisory capacity and provide an officer to inspect the security arrangements in all Government Departments and Ministries and give the necessary instructions to the Departmental Security Officers. They have admitted that the type of data security envisaged by the Public Accounts Committee which involves developing and installing in the computers, hardware and software keys to obviate chances of leakage of data to unauthorised persons is a highly technical matter and beyond the competence of the Home Ministry. The Department of Electronics have assured the Committee that they would look into the problem and take necessary measures in this regard. A Security Cell is being set up in the Computer Directorate of the Department of Electronics for this purpose.
- 1.57. The Committee are glad that, as per their suggestion Government have set up an Inter-Ministerial Standing Committee on Security with specific terms of reference. One of the reference of this Committee is to consider whether technological devices could be installed straightaway on the imported computer systems working in the sensitive departments so that no risks are taken with data security. The Committee stress that this aspect should receive the highest priority and a start should be made to instal, with the help of local computer engineers, hardware and software keys on systems hired or purchased from foreign multi-national corporations.
- 1.58. The Committee note that no specific instructions have been issued by the Ministry of Home Affairs on data security in the case of computers installed in various Ministries/Departments The Committee would like the Ministry of Home Affairs to draw up, in consultation with the Department of Electronics, suitable guidelines to be observed by all Ministries/Departments in the matter of data security. There should be regular programme of inspection of Computer Sections in the various Ministries/Departments and the reports of the Inspecting Officers should be processed by the Security Cell being set up in the Computer Directorate of the Department of Electronics, with a view to plugging all loopholes in the interest of security.

Indian Operations of IBM/ICL

- 1.59. Dealing with the Indian Operations of IBM ICL in paragraphs 6.1 to 6.183 of the Report, the Committee expressed their unhappiness that no care was taken to see that the rentals for the machines supplied by the IBM, which had been refurbished, were fixed on a rational basis after taking into account the import price. the estimated cost of refurbishing, the life of the machine, etc. The fact "that the hire charges were exorbitant and bore hardly any relationship to the nominal cost at which these 'As Is' machines were imported as 'hulks' and refurbished after arrival" had already been brought out by the Committee in their 127th Report on the use of computers in the Railways. Failure to effect rentals on a rational basis had cost the Government large amounts of money. The Committee observed that the Government should have taken pains to see that there was a co-relation between the cost at which the goods were imported and at which they were made available to the end users including Government Departments, in order to prevent all scope for defrauding the public and the Exchequer by dexterous manipulations.
- 1.60. Noting that there was a total outflow of foreign exchange to the tune of Rs. 10.83 crores during the period 1969 to 1974 on account of IMB operations in India and Rs. 9.58 lakhs during the period 1972-73 to 1974-75 on account of ICL operations, the Committee observed that care should be taken to prevent a net outflow of foreign exchange and that import requirements for export manufacture should be treated distinctly from those for the internal requirements of the country.
- 1.61. Noting that the Government of India had come to the conclusion that "the activities of the IBM and ICL should be so reoriented that they are concentrated either in heavily exportoriented production programme of both hardware and software and or in domestic manufacturing activities involving production on the basis of advanced technology on fully contemporary computer equipment which fulfils genuine national needs", the Committee expressed the hope that it would be possible for the country to be self-reliant except for too highly sophisticated areas requiring large sized computers. The Committee felt assured that even if IBM desired to leave the country, the Government would not be in any way the loser because India had an abundance of skilled manpower.

- 1.62. The Committee struck a note of caution when they observed that the proposals put forward by IBM or ICL in pursuance of the foreign Exchange Regulation Act should be scrutinised minutely by Indian Experts well-versed in electronics, costing etc. so that these companies were not permitted to circumvent the countries' laws.
- 1.63. Adverting to the recommendations made in their 127th Report (5th Lok Sabha), the Committee deplored the failure of the Central Board of Excise and Customs to furnish information about the purchase price paid by Government Departments on items imported by IBM and ICL and the actual value of these articles declared to Customs at the time of importation by the suppliers. "If the differentials between the prices charged to the users and the prices shown in the Customs document by IBM, as in the case of Railways is any indication, IBM must have defrauded our Customs revenue on a huge scale." The Committee regretted that "things appear to be done in Customs on an ad hoc basis and there is no consistent principle behind assessment of customs duty on the import of 'As Is' machines."
- 1.64. The Committee expressed their unhappiness at the failure of the Customs to take recourse to the customs rules which permitted fixation of prices for assessment of customs duty on the basis of the domestic selling price in the country of origin.
- 165. The Committee disapproved the manner of payment of drawback to IBM and ICL. The Committee learnt that in the absence of physical verification of the duty paid components going into manufacture, the Customs authorities were depending on the certificate of the exporter which was admissible under Rule 11 of the Customs and Central Excise Duties Drawback Rules. The Committee observed that an amount of Rs. 33.32 lakhs due from IBM on the ground of excess payment of drawback was not a small amount and Government should review thoroughly the entire basis and the modalities followed in determining and paying drawback so as to recover the over-payments made to both IBM and ICL on this account.
- 1.66. The Committee observed that substantial additions had to be made by the Income-tax authorities in the returns submitted by IBM during the years 1967-68 to 1973-74. The major addition was on account of excessive development rebates claimed by the company which were not allowed by the Income Tax Officer. The Appellate Assistant Commissioner had however granted relief to IBM. The Committee noted that the Department filed an appli-

cation before the Bombay High Court. The Committee desired that Government should pursue the matter before the court conclusively.

- 1.67. The Committee also questioned the justification for claiming development rebate on the "As Is" machines imported by IBM in contravention of the Income Tax Law, viz. Section 33(1)(a). The stand taken by the Income Tax Department in the matter of allowing the depreciation for calculation of taxable income in respect of "As Is" machines was also objected to.
- 1.68. Regarding the stand taken by the Income-tax Department in the matter of allowing the depreciation for calculation of taxable income in respect of IBM and ICL, the Committee observed: "It is common knowledge that a large number of machines having no book value are in circulation and are earning exorbitant rentals for IBM and ICL. The Income-tax authorities, however, stood by the letter of the law and merely followed the criteria of "original cost of any plant or cost at the time of installation and calculated the depreciation according to the prescribed rates without following any independent check with reference to the entries in books of the company. It is common knowledge that IBM recovered depreciation on its machines hired out on a 4 years life basis but actually the machines last much longer." The Committee felt that the Income-tax authorities took a very legalistic stand adopting a certain prescribed formula irrespective of the amount of depreciation charged in the books of the company. Since the life of the machines is admittedly much longer than the period taken by IBM, the Committee felt that the company might have been making excess claim on the ground of depreciation in order to reduce their taxable profits. The Committee asked the Government to go into the matter in all its aspects and re-examine the cases where excess depreciation might have been allowed.
- 1.69. The Committee noted that Rs. 4.98 lakhs were allowed to be repatriated on account of development rebate reserve. The Committee felt that the philosophy behind development rebate was to give incentive to develop industries in India. That could be done by utilising the reserve for the intended approved objective. But the reserve had to be kept intact and not frittered away by way of dividends or repatriation abroad after eight years. The Committee urged that the matter should be re-examined so as to preserve funds created out of the development rebate for development within the country.

- 1.70. The Committee expressed surprise that the returns of income for several successive years from 1964-65 to 1973-74 in respect of IBM, a giant world company, were assessed by an officer only of the rank of Income-tax Officer. Inviting the attention of the Government to the recommendations made in their 186th Report on Corporation Tax and Income Tax, where it was reiterated that initial assessment of large companies should be made centrally by experienced senior officers of the department not lower in rank than an Assistant Commissioner, the Committee desired that the Ministry should investigate how the assessment of IBM for all these years was being done by only an Income-Tax Officer. The Committee further desired that responsibility in this matter should be fixed
- 1.71. Adverting to the question of reduction in rates charged by IBM and ICI to the extent of 25 per cent to 30 per cent, the Committee referred to the suggestion of the Inter-ministerial Working Group that the Department of Electronics might discuss with IBM and ICL regarding further steps to reduce the prices with effect from January, 1969 and desired to know the results arising out of the negotiations.
- 1.72. In their Action Taken Notes, the Department of Electronics have stated that "As Is" programmes have been phased out and prices/rentals charged by the multinationals like the IBM and ICL have been referred to the Inter-Ministerial Committee for examination of the reasonableness of the same. A proposal is also under consideration for outright sale of the machines at present on hire on a certain basis.
- 1.73. Noting the observations of the Public Accounts Committee on the remittances liability that arose out of the operations of IBM and ICL in India, the Department of Electronics have stated that a decision has been taken to ensure that in future the foreign exchange liability is reduced. The Department have also stated that IBM has indicated that according to their international corporation strategy they would not operate in any country with even a minority equity holding of the host country. Revised proposals have been submitted by IBM and these are under consideration by Government. Government's basic policy is that a 100 per cent Foreign equity company may be permitted to continue only if its activities are for 100 per cent export. The Department have hoped that on the hasis of the decisions of the FERA Committee the commanies as restructured will operate in a way that foreign exchange remittances will be on a reduced level and would be commensurate with the efforts of these companies to conform to the national policies.

- 1.74. The Department of Electronics have stated that the Service Bureaus operated by IBM and ICL are now being phased out to be taken over by other computer centres set up by Government, or in the public sector, or by some of the Indian nationals returning from abroad who have brought in computer systems out of their foreign exchange savings abroad, and also by some of the existing computer installations in the country which have spare capacity. The Government is also going ahead with the plan of setting up of Regional Computer Centres, or supporting large computers at locations such as Delhi, Calcutta, Bombay, Poona, Kanpur and Bangalore, Hyderabad and Madras. The programmes will be extended to other centres such as State capitals and centres of industrial activity subsequently.
- 1.75. The Department have assured the Committee that the applications and proposed programmes of the companies are being carefully scrutinised by experts both in the Reserve Bank and the Department of Electronics. The applications will be dealt with keeping in mind the requirements of the national Electronics policy and FERA.
- 1.76. In regard to the observations of the Committee that the Customs Authorities failed to furnish information about the purchase price paid by the Government Departments on items imported by IBM and ICL and the actual value of these articles declared to customs at the time of importation by the suppliers, the Department of Revenue and Banking (Revenue Wing) have stated that the actual import value of data processing machines was called for by the Department of Expenditure but the same could not be collected by the Customs Houses for want of relevant details such as names of importers, description, Bill of Entry number or the ships names and rotation numbers. The Department was however aware of the possibility of under-invoicing by M/s. IBM and action was taken during these years to check such mal-practices.
- 1.77. It has also been stated by the Department of Revenue and Banking (Revenue Wing) that the data processing machines imported by IBM against licences issued to various Government Departments and then sold to these Departments were brand new and not "As Is" machines
- 1.78. On the question of the payment of drawback to IBM and ICL, the Department of Revenue and Banking (Revenue Wing) have informed the Committee that "An amount of Rs. 33.32, 560.82 was determined by the Central Government as drawback due in respect of 688 machines of Card Data Recorder Type 129 Machines ex-

ported by M/s. IBM. The amount has not yet been paid to the party by the Bombay Custom House and the question of over-payment does not arise."

- 1.79. As regards the observations of the Committee on the matter of allowing depreciation to IBM and ICL for calculation of taxable income, the Department of Revenue and Banking (Revenue Wing) have stated as under:
 - "It is submitted that depreciation is allowed on various business assets by the prescribed rates under the Income-tax Rules, 1962, irrespective of the amount of depreciation charged by the assessee in his books. The amount charged in the books do not affect the depreciation allowable under the provisions of Law, and, therefore, does not reduce the taxable profits."
- 1.80. On the question of excessive development rebates claimed by IBM, the Department of Revenue and Banking (Revenue Wing) have stated that "The question whether development rebate is admissible on data processing machines is in dispute and at present the matter is before the Bombay High Court in a Departmental Reference. However, development rebate has been withdrawn in respect of plant and machinery installed after 31-5-74 barring exceptional cases referred to in S. 16 of the Finance Act, 1974". The Department have further stated that "depreciation is allowed on various business assets at the prescribed rates under the Income-tax Rules. 1962, irrespective of the amount of depreciation charged by the assessee in his books. The amounts charged in the books do not affect the depreciation allowable under the provisions of law, and therefore, does not reduce the taxable profits."
- 1.81. The Department of Revenue and Banking (Revenue Wing) have accepted the suggestion of the Committee that development rebate reserve should be construed as an incentive to develop industries in India and this could be done by utilising the reserve for the intended approved object; it should not be allowed to be frittered away by way of dividends or repatriation abroad.
- 1.82. As regards the observations of the Committee that initial assessment of large companies should be made centrally by experienced senior officers of the department not lower in rank than an Assistant Commissioner, the Department of Revenue and Banking (Revenue Wing) have stated that "the case of this company has now been assigned to an Inspecting Assistant Commissioner of the Income-tax at Bombay. Instructions have already been issued to Commissioners of Income-tax to assign cases of foreign companies

with last assessed income exceeding Rs. 5 lakhs to Inspecting Assistant Commissioners." On account of manpower, the Department have pleaded that it has not been possible to post more Inspecting Assistant Commissioners for this purpose. They have assured that additional manpower requirements are being worked out in order to implement the Committee's recommendation fully.

1.83. As to the question of reduction in rates charged by IBM and ICL, the Department of Electronics have explained the position as under:

"Arising out of discussions held by the Inter-Ministerial Working Group with IBM and ICL, these companies have put forward a consolidated proposal in response to the requirements under FERA, outlining certain terns for transfer of ownership of machines currently hired out by them to various users. The IBM proposal is for an outright sale of all machines, currently rented out to the customers, on the basis of capitalisation of rentals over a period of time. Such terms have been offered as part of a package which not only takes into account the upward price revision by the company at the time devaluation in 1966 arising out of rentals being in Indian rupees against contracts entered in dollars but also certain other matters relating to customs duties, inter-Company Billing Prices (ICBP) etc., which standing between IBM and Government. offer of IBM indicates a certain appreciation on their part of Government's concern about the high rates for their machines, the matter is still under consideration of Government for a final settlement. The ICL proposal for closing down of the hundred per cent foreign equity operations of ICL, and transfer of machines held on rentals by ICL to the international Comwhich will puters India Manufacturing Ltd. (ICIM) be restructured with 40 per cent minority equity; there was no upward price revision by ICL at the time of devaluation in 1966. The transfer is to be effected on the basis of payments to ICL(I) (whèther already paid, or remains to be paid at the time of transfer) of 70 per cent of the established hire for a period of 10 years for computers and 7 years for conventional equipment from the original date of installation. proposal is also under consideration of Government."

- 1.81. The Committee note with satisfaction that the question of prices/rentals charged by the multinational companies has been referred to the inter-Ministrial Committee and, based on their findings, necessary action will be taken by Government for conversion of hire into purchase. The Committee desire that Government should consider the offer made by IBM for outright sale of the machines at present on hire in all its aspects and arrive at a decision which would be in the best public interest.
- 1.85. The Committee are glad that the Government have accepted the observations of the Committee in regard to the remittances liability that arose out of the operations of IBM and ICL in India. The Committee hope that a constant watch would be kept so as to ensure that the companies as restructured operate in such a manner that the foreign exchange outgo will be on a reduced scale and will be commensurate with our national policies.
- 1.86. The Committee note that the IBM have indicated that in accordance with the inter-national corporation strategy they would not operate in any country with even a minority equity holding of the host country. The Committee desire that the revised proposal submitted by the IBM in this regard should be examined in all its ramifications and an early decision taken keeping in view the national interests as also the requirements of the foreign exchange regulation Act.
- 1.87. The Committee have learnt with satisfaction that the programmes of 'As Is' manufacture have been phased out and that plans are afoot for setting up of regional computer centres which would take over the functions now being performed by the Service Bureaus operated by the multi-nationals.
- 1.88. In their 221st Report, the Committee regretted that the Department had not satisfactorily explained the observations made by the Committee in their 127th Report (5th Lok Sabha) that there was a serious difference in the prices shown by IBM for Customs in the import documents and those claimed by them from Railway Administration. The Committee had also in the same Report regretted the inability of the Central Board of Excise and Customs to furnish information about the purchase price paid by Government Departments on items imported by IBM and ICL and the actual value of these articles declared to Customs at the time of importation by the supplies. It is surprising that the Department of Revenue and Banking have again expressed their inability to furnish the information on the plea that the actual import value of data processing machines 2109 LS—3.

could not be collected from the Customs House for want of relevant details. The Committee cannot but express their unhappiness over the failure of the Department to collect the relevant data. However, the Committee note that their observations on wide scale under-invoicing by IBM have not been countered.

- 1.89. In regard to the payment of drawback to IBM, the Committee learn that an amount of Rs. 33.32 lakhs has not yet been paid to the party by the Bombay Custom House and a further verification is under way by the Bombay Customs in order "to satisfy themselves that in respect of the same materials used in machines both duty drawback and liquidation of duty liability in respect of bonded materials are not claimed."
- 1.90. The Committee note that an amount of Rs. 33.32 lakhs was determined by the Central Government as drawback due in respect of 688 machines of Card Data Recorded Type 129 machines exported by IBM. The amount was held over pending verification whether some non-duty paid bonded materials had also been used along with the duty paid material by the manufacturers. The Committee feel that apart from thoroughly investigating this aspect Government/Customs House should also go into the question of Rs. 77.70 lakhs which have already been paid to IBM as a drawback on exports to make sure that no irregularities have occurred therein. The Committee would like a similar exercise to be done in respect of other multi-national manufacturers, viz ICL etc. who may have been given drawback on similar grounds.
- 1.91. The Committee further note that the Appellate Assistant Commissioner had granted relief to the IRM on account of development rebates claimed by the company which was not allowed by the Income-tax Officer earlier. It has been stated that the Department had filed an application before the Bombay High Court in this respect. The Committee would like to know the decision of the Bombay High Court in this case.
- 1.92. The Committee are not satisfied with the explanations offered by the Department of Revenue and Banking in regard to allowance of depreciation of various business assets of IBM and ICL. The Government have not conducted a detailed examination, as suggested by the Committee, to find out the extent of excess depreciation that might have been allowed to IBM and ICL. The Committee would like to be appraised of the actual position in this regard. In particular, they would like to know the total depreciation claimed by IBM and ICL and the amount that was actually allowed to them as also the amount disallowed.

- 1.93. The Committee are glad that Government have accepted their suggestion that development rebates should be construed as an incentive to develop industries in India and this should not be frittered away by way of dividends or repatriation. It is a matter of satisfaction that development rebate has been withdrawn in respect of plant and machinery installed after 31 May, 1974 barring exceptional cases referred to in Section 16 of the Finance Act, 1974.
- 1.94. While the Committee appreciate that the assessment of returns of income in respect of IBM, a giant company, has now been entrusted to an Inspecting Assistant Commissioner of Income-tax at Bombay, they are unhappy that no enquiry appears to have been made to fix responsibility for the initial lapse, viz., assessment of income-tax of IBM pertaining to the years 1964-65 to 1973-74 by an officer of the rank of Income-tax Officer. The Committee would like to stress that the constraints of manpower should not be a cause for relegating the work of assessment of income of big companies of the world standing like IBM to junior officers.
- 1.95. The Committee learn that the offers made by IBM and ICL in regard to the transfer of ownership of the machines currently hired out by them to various users are under consideration and the modalities of such transfers are being worked out. The Committee would like to be informed about the outcome of the negotiations.

The Indigenous Computers Industry

- 1.96. Indigenous computers industry is the subject matter dealt with by the Committee in Chapter VII (Paragraphs 7.1 to 7.88) of their Report.
- 1.97. Keeping in view the large demand for computers and data processing equipment as projected in estimates for the Fifth and Sixth Plan, the Committee stressed the need for intensive efforts to step up the production of indigenous computer systems.
- 1.98. The Committee analysed the strategy developed for attaining self-reliance in the field of computers. Such a strategy has the following components:
 - (a) Ensuring that the direction and pace of advance of production capacity for computers and allied equipment, as also the availability of appropriate computational facilities both for direct use and for supporting the development of software tools are determined by national needs, priorities and requirements;

- (b) The key-segments of the computer industry are under national control and free from any monopolistic trends;
- (c) That a viable indigenous programme of production of computer hardware and software is built up to meet national requirements and to generate surpluses for export; and
- (d) That over a period of time, a substantial part of the technology needed for the design and production of systems, sub-systems, components and materials and also the supporting software is generated through indigenous research and development; what is more, that such technology will be appropriate to our needs and over a period of time become contemporary in terms of international availability.
- 1.99. The Committee felt that projects for the future demand of computers should be based on realistic considerations as any effort to evolve an effective strategy directed towards self-sufficiency in the field of computers would be meaningless in the absence of a reliable qualitative and quantitative estimate of the demand that exists now and is likely to arise in the country in the future.
- 1.100. The Committee pointed out that even he present indigenous computer manufacturing programme is largely based on imported peripherals and components. The Electronics Corporation of India Ltd. is dependent significantly on imports for vital components and materials and the country has still to make considerable leeway in indigenisation. It is, therefore, all the more necessary, the Committee observed, that the facilities available with public undertakings like Bharat Electronics Ltd., should be utilised for developing indigenous design and undertaking manufacturing activities. Side by side, indigenous manufacturing firms in the private sector, who have the capability of undertaking design and development activity in the field of computers should be identified and the question of utilising the capacity considered.
- 1.101. While welcoming the decision of the Government to set up a Semi-conductor Corporation for making large scale integrated circuits indigenously in the public sector, the Committee stressed the need for maintenance of close and integral link with the Electronics Corporation of India which is the pioneer in the field. They also stressed the need for having a time-bound and achievement-oriented action, specially for creating the necessary infra-structure for the production of mini-computers.

- 1.102. Realising the potentialities for the export of computer software, the Committee suggested that the Department of Electronics should explore the right marketing outlets for software export from this country.
- 1.103. For attaining the goal of self-reliance in the field of computers, the Committee stressed the need for intensifying research and development. In this context, the Committee suggested that the Department of Electronics should work out the requirements of technical personnel to match the manufacturing programme envisaged for the computer industry during the 5th and 6th Plan periods. The Committee also recommended that Government's policy for self-reliance should be embodied in a white paper which should be laid before Parliament within a period of six months.
- 1.104. The Committee noted that the Estimates Committee in their 66th and 85th Reports (Fifth Lok Sabha) had suggested that the question of transferring the administrative control over the Electronics Corporation of India Ltd. from the Department of Atomic Energy to the Department of Electronics should be considered. The Public Accounts Committee felt that if both these Corporations (Computer Maintenance and Electronics Corporation) were brought under the administrative control of the Department of Electronics, it should be possible to foster an integral linkage from the very inception and also avoid overlapping of responsibilities.
- 1.105. In their Action Taken Notes, the Department of Electronics have stated that "under the Technology Development Council, the current programmes of ECIL relating to the TDC-12, 312 and 316 computers are being fully supported; as also the development of larger TDC-332 system. Financial support has also been given under this programme to BEL for the development of miniperipherals and to Kerala State Electronics Development Corporation for 18 columns printer. Letters of Intent have been issued to a number of units for manufacture of peripherals for mini-computers such as Floppy disk drives cassette drives, alphanumeric displays etc. Licensing action for mini-computers is on hand."
- 1.106. While agreeing with the Committee on the basic strategy to attain self-reliance in the field of computers, the Department of Electronics have stated that in keeping with this strategy, they have been endeavouring to approve of industrial licences in the case of a Floppy disk drives cassette drives, alphanumeric displays etc. tors for indigenous production of contemporary computer hardware.

A close watch is being maintained on the programmes approved to ensure that such programmes are implemented within reasonable time-frames. The role of foreign companies is maintained and controlled, particularly through the provisions of FERA to ensure that they are not in commanding positions in this field. A number of centres for software for export purposes as well as meeting the national requirements have been built up. The Department of Electronics have further stated that, based on the recommendations of Technical Panels, licensing action has been taken and a number of development projects have been assigned to various agencies. Among the continuing activities of the Department have been listed a close monitoring of the production levels achieved in industry, the degree of adoption of computers by user agencies, the successful promotion of meaningful applications and generally the build-up of confidence levels in the role of computers in national development and a periodical review of the demand projections. The calculator industry which was licensed in 1972 would be reviewed and studies of other areas would continue to be carried out by the Department from time to time.

- 1.107. As regards the observations of the Committee that ECIL is dependent significantly on imports for vital components and materials, the Department of Electronics have stated "Manufacturing programmes of some of the foreign companies operating in India are being modified to meet the requirements of some of the sophisticated peripherals required for the indigenous programmes.... Consideration is being given to the introduction of a new computer system of the ICL 2903/2904 series, to be manufactured by the International Computers Indian Manufacture which will be converted into a 60 per cent majority Indian Company after amalgamation with the present 100 per cent (UK) Equity Co. ICL (India). The details of this possible manufacturing programme including the role of BEL in this is under examination at present."
- 1.108. It has been stated that a number of firms in the private sector have been issued letters of intent for manufacture of minicomputers, micro-processors micro-processor based cash registers and peripherals.
- 1.109. The Department of Electronics have stated that there is a close working relationship between the Department of Electronics and Electronics Corporation of India Ltd. based on mutual consultation and interaction in respect of new developments in the electronics industry and technology.

- 1.110. The Department have informed the Committee that a project for the setting up of the Semi-Conductor Complex was approved in May 1976. A site Selection Committee was appointed to make recommendations regarding suitable sites for this Complex. That Committee has submitted its report which is under the consideration of Government. It has also been stated that several aspects concerning the implementation of the Project are being pursued. These include: working out the precise product-mix (in terms of equivalent device types available abroad); working out the precise manner, in which production should be phased; negotiating with vendors abroad for technology equipment and raw materials; working out the organisational structure, the phasing of requirement of staff, action for obtaining licence for manufacture and import of capital goods.
- 1.111. As regards the question of having time-bound and achievement-oriented action for creating the necessary infra-structure for the production of mini-computers, the Department of Electronics have stated that since it was set up in 1970 the Department of Electronics has been seized of the problem, among others, of ushering self-reliance in the field of computers. For development of a viable indigenous industry, concerted action is being taken in several directions, including streamlining licensing procedures, development of indigenous equipment and components, software development and export, drawing of long range programmes, etc.
- 1.112. It has been stated that the strategy of the Department of Electronics is for the manufacture of computer systems for various applications. The manufacturing programmes in Public Sector Undertakings, Electronics Corporation of India Ltd., Hyderabad, Bharat Electronics Ltd. Bangalore and Hindustan Teleprinters Ltd., Madras are being enlarged and strengthened. Simultaneously encouragement is being given to the small scale and organised sectors to participate in the programme on the basis of their practical skill and potentialities.
- 1.113. As regards export potentiality, it has been stated that the Department of Electronics have set up a cell in Electronics Trade and Technology Development Corporation Ltd. (ETTDC) (a Department of Electronics public sector undertaking) to promote software exports to East European countries.
- 1.114. In order to deal with the area of Research and Development leading to production, the Electronics Commission has set up a Technology Development Council (TDC). National seminars on R&D are being and will be held periodically wherein all concerned in the

production sector (private and public), Research and Development establishments, educational institutions and professional bodies will be invited to participate.

- 1.115. In order to cope with the manpower requirements, the Department of Electronics have taken up a number of steps such as increasing the output at the M. Tech. level in the hardware and software streams, organising tailored courses to cater to specific needs such as that of the Computer Maintenance Corporation, Advanced Data Processing courses for the armed forces, efforts towards practical training, etc.
- 1.116. As regards the suggestion of the Committee that a White Paper should be laid before Parliament within a period of six months outlining Government policy, the Department have stated that "A White Paper will be presented to Parliament as recommended. It is suggested that this will be done within a year from now to enable an assessment of various initiatives that have already been taken."
- 1.117. On the question of transferring the administrative control over the Electronics Corporation of India Ltd. from the Department of Atomic Energy to the Department of Electronics, the Department of Electronics have stated that "Electronics Corporation of India Ltd. provides a classic example of transfer technology without any measure of foreign collaboration. This has been primarily due to the integral linkage between Department of Atomic Energy and Electronics Corporation of India Ltd. and continuing utilisation of spin-off activities from the strong and competent Electronics Groups in Bhabha Atomic Research Centre, Tata Institute of Fundamental Research and other units of Department of Atomic Energy The Department of Atomic Energy has expressed the family.... views that there are considerable advantages in Electronics Corporation of India Ltd. continuing under the administration control of Department of Atomic Energy. The existing close working relationship between Electronics Corporation of India Ltd. and Department of Electronics ensures the proper distribution of functions and also helps in avoiding overlap situations."
- 1.118. The Committee's attention has been drawn to the following extracts from the book entitled "The Coming Clash" by Hugh Stephenson which provides an insight into the functioning of multinationals in U.S.A. and elsewhere:—
 - "In response to the requirements of modern technology and large-scale industrial organisation there have developed some three to four hundred companies, the majority based

in the United States, whose range of industrial activities overrides this national framework. These new leviathans, with an international existence of their own, dominate the commanding heights of modern industry, above all in the newest and fastest growing science-based industries. And national governments are having to adapt their fundamental attitudes and practices, or else risk the consequences of falling behind in this present phase of industrial evolution.

Take International Business Machines (IBM). The research and development costs of the so-called third-generation IBM computers was in the region of \$4,500 million. This was something like double the money spent on the wartime Manhattan project to produce the atom bomb that was dropped on Hiroshima."

1.119. The Committee are glad that with a view to attaining selfsufficiency in the field of computers, the Department of Electronics are endeavouring to approve of industrial licences in the case of a number of agencies in the small scale as well as in the organised sectors for indigenous production of computer hardware The Committee have stressed time and again the need for keeping a check on the role of the multinationals in so far as the computer development or programming is concerned. There cannot be two opinions that the multinationals, which have been aptly described as 'new leviathans with an international existence of their own', dominate the commanding heights of computer industry. It is a matter of common knowledge that in the particular case of electronic computers, the IBM has nearly a world monopoly. The Committee note that the Department of Electronics are maintaining a close watch on the programmes of the multinationals and the role of such companies "is maintained and controlled, particularly through the provisions of Foreign Exchange Regulations Act to ensure that they are not in commanding positions in this field."

1.120. In this context, the Committee also welcome the decision of the Department of Electronics to open a number of centres for software development with a view to develop software for export purposes as well as meeting the country's requirements.

1.121. The Committee note that the Department of Flectronics propose to conduct a review of the calculator industry which was

licensed in 1972. The Committee would like to be informed about the results of the review and the action taken in pursuance thereof.

- 1.122. The Committee would like to be informed in due course of the strides made towards the introduction of a new computer system of the ICL 2903/2904 series to be manufactured by the International Computers Indian Manufacture Ltd. which is proposed to be converted into a 60 per cent majority Indian company after amalgamation with the present 100 per cent (UK) Equity Co. ICI (India).
- 1.123. The Committee note the steps being taken by the Department for setting up of Semi-conductor Complex for manufacturing large scale integrated circuits indigenously. The Committee desire that the site for the Complex should be decided upon without further delay so that a start is made for the proper functioning of semi-conductor Complex.
- 1.124. While noting the steps taken by the Government for creating the necessary infra-structure for the production of computers as also creating right climate for the export of India-made computers, the Committee urge that a white Paper Outlining Government policy and performance in the field of computerisation should be presented to Parliament as early as possible but not later than the end of 1978 so that the Members and the public have an opportunity to express their views and give suggestions for achieving a breakthrough in this important technological field.

CHAPTER II

RECOMMENDATIONS/OBSERVATIONS WHICH HAVE BEEN ACCEPTED BY GOVERNMENT.

Recommendation

The Committee note the conflicting views regarding factors motivating the introduction of computers and other data-processing equipment in various organisations. Reconciliation between these divergent views is, perhaps a difficult task, particularly when the subject of computerisation itself is a complex one, often even shrouded in an aura of supra-technological mystery. The Committee found, for instance, that "computers were introduced in many cases as mere status symbols and to keep up with the 'Joneses', and not with any clear-cut and calculated assessment of its benefits as an effective management tool." An expert body looking into this question of Automation (1972), pointed out that the aforesaid criticism was "not altogether unfounded", and added that 'even where the computer was introduced in order to obtain specific advantages, in most cases it was still not being efficiently used as an adjunct to a well-designed management-information system'. Another study sponsored by the Administrative Staff College, found, however, that the computer 'does not constitute a status symbol in the user organisations'.

[Sl. No. 1 (Para 2.41) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action taken

- 1. In the past, the position has been largely as stated by PAC above. The comments of the Committee are noted from the viewpoint of ensuring that in the future there is a clear cut policy for computerisation in terms of areas of priority, choice of optimal system planning for its introduction and utilising the system fully.
- 2. The Department of Electronics is the agency in Government responsible for clearances for procurement of computers in Government either from indigenous sources or through import, in terms of the changes in the Business Allocation Rules effected in August, 1975.

 The Department of Electronics invariably insists on the user agencies

drawing up a detailed justification outlining the areas of applications envisaged as well as detailed justification for the proposed computer facilities. Such a justification provides the basis for determining the relevance of the applications in the Indian context and helps in determining the appropriate facilities which will meet the application needs on a cost-economic basis. The approvals for systems are given strictly on the basis of established needs and also takes into account possibilities of using spare capacity available on other systems in Government which can be accessed. From August, 1975 onwards, the Department of Electronics is also responsible for all computer imports for all users through not for non-Government users buying indigenous systems.

[Deptt. of Electronics No. 275(1)/76-DE, dated 25th August, 1976]

Recommendation

In so far as the introduction of computers and data-processing equipment in Government department is concerned it would appear from an analysis of the evidence discussed in the preceding paragraphs that, barring few cases where computerisation was inescapable on account of the complexity of the applications (as in the case of the Department of Space or the Tele-communication Research Centre), Computerisation had been generally resorted to on a relatively 'ad hoc' basis without even any serious cost-benefit analysis and on an 'a priori' assumption that such equipment would improve the efficiency and speed of data-processing. Some Ministries and Departments such as the Department of Defence Production, the Planning Commission, India Meteorological Department, Directorate General of Supplies and Disposals, Central Bureau of Investigation, etc. have claimed that they had attempted some kind of a job analysis before going in for computers. The reasons offered by them are, however, essentially the somewhat routine arguments advanced by any organisation going in for sophisticated electro-mechanical gadgetry, namely, that such equipment would improve efficiency, enable the handling and processing of a large volume of data with case speed and reliability and facilitate their efficient storage and retrieval. It would also be seen from the later chapters of this Report that many of the Ministries and Departments have not even been in a position to quantify, in concrete terms, the benefits expected to accrue from computerisation, their replies in this regard being in general terms and rather vague.

[Sl No. 2 (Para 2.42) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action Taken

A continuing effort is made by the Department of Electronics in making the user departments increasingly conscious of being able to quantify benefits from using computers for various application areas. Whilst applications in the nature of Inventory Control, Machine Shop Scheduling, Process Control should be quantifiable on the basis of experience gained on other systems implemented in similar environments, even on aspects, such as improvements in efficiency, personal management use of computers for budget, planning and social welfare, the pay offs should be more quantitatively definable than attempted so far. The Department of Electronics will endeavour to carry out studies/field projects with regard to quantification of aspects of benefits accruing from computerisation from time to time.

[Department of Electronics No. 275(1)-76-DE, dated 25th August, 1976.]

Recommendation

The Ministry of Information and Broadcasting, alone among other sister organisations, have unequivocally conceded that no job analysis as such was done before acquiring the data-processing equipment for the Commercial Broadcasting Service and Audience Research Unit of All India Radio. While data-processing equipment had been acquired for the Commercial Broadcasting Service 'as per the instructions' of the Minister and the Secretary of the Ministry, the equipments for the Audience Research Unit were purchased 'to cope with the heavy tabulation work coming up at various Audience Research Units as a result of reorganisation of Audience Research'. The fact that the equipments acquired by the Commercial Broadcasting Service have not been put to use even two years after installation would indicate that there was obviously no genuine assessment of requirements, a default which the representative of the Ministry was good enough to acknowledge before the Committee.

[Sl. No. 3 (Para 2.43) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action Taken

The Ministry of Information and Broadcasting have confirmed that the data processing equipment acquired by the Commercial Broadcasting Service has since been put to use with effect from 5th May, 1976. They have further stated that the observation of the Committee has been noted for future guidance and has been brought

to the notice of all senior officers in the organisation vide Director General AIR's Circular No. 2(37)/75-GA, dated 17th August, 1976.

[Department of Electronics No. 275 (1)-76-DE, dated 25th August, 1976.]

Recommendation

The Committee have learnt from the Department of Electronics that the majority of the computers currently in use in the country are largely data-processing machines which support essentially accounting and other book keeping functions, and that this had been the result of the way in which business in India had been promoted by the foreign controlled computer industry. Some of the applications computerised in government departments lend clear support to this view. This is also generally corroborated by the study sponsored by the Administrative Staff College according to which, the Indian-Management is, by and large, 'not very clear about the overall objectives of computers and, in many cases, computers were acquired with a view to dealing with the immediate and specific problems'.

[Sl. No. 4 (Para 2.44) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action taken

The pattern of computer utilisation which was till lately largely based on data processing machines which supported essentially accounting and other book-keeping functions have now been reoriented, laying accent on production and development-oriented applications. The primary indigenous manufacturing programme for computer systems at the Electronics Corporation of India Ltd. is based on a computer which would support process control operations and could also be suitably adapted for supporting management functions in industrial organisations. Import of computers is primarily permitted to support applications in the nature of large scale simulations, R&D, Industrial Planning and management control applications and for software export rather than for routine clerical operations.

[Department of Electronics No. 275(1)-76-DE, dated 25th August, 1976.]

Recommendation

Computers had been introduced in Government Departments in the past to fulfil, no doubt, certain emerging requirements, but it was done without objectively evaluating the overall needs and 'without a careful enough scrutiny of what the end-objectives are and how.

the computers would fulfil these. The system acquired by the Registrar General of India is a case in point. The Committee find that an elaborate system comprising an IBM-1401 computer and both IBM and ICL peripheral equipment was acquired by the Registrar-General for the processing of Census data with a view to achieving efficient storage, reliable retrieval uniform cross-classification, economy and speed. It is just not clear to the Committee why for what is apparently a one-time application it was necessary to acquire the equipment when this work could, perhaps, have been got executed through a centralized computer agency such as the Government Computer Centre.

[Sl. No. 6 (Para 2.46) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action Taken

The Registrar General India (Census) has clarified that in 1965 when the proposal for acquiring a computer was mooted, there was no centralised computer agency available through which work could be got executed. The computer of the Registrar General's Office was set up in October 1966; the computer centre was set up in November, 1967. The workload on the computer of the Registrar General's office in 1971—73 was so heavy that it could not cope with it. It became necessary, therefore, to hire computer time on the computers of the Railways located at Gorakhpur, Calcutta, Bombay, Madras and Hyderabad. If the Registrar General had depended completely on a centralised computer agency for processing the data of the census of 1971, the processing would have been delayed considerably.

Census operations call for considerable data processing activity immediately following the enumerations which are carried out once in a decade. However, the volume of data, generated out of the census operations would perhaps be the largest single collection of data on a national basis which can support a very wide range of planning applications on a national, state and regional basis, on aspects relating to a wide range of areas such as manpower, social conditions, ethnic backgrounds, work patterns, migration problems economic planning, training and other social aspects.... Such data will also support studies in the field of econometrics and social sciences. It would, therefore, be very necessary for the census data to be properly organised and made available to support the various aspect as mentioned above.

The utilisation of the computer system after 1973 perhaps indicates that not much use has been made on a continuing basis of this vast collection of data which is available. With the setting up of National Informatics Centre at Delhi, which will build up an information base in social sciences it can be anticipated that increasing use of the data will be made by Government Departments. The spare capacity available in Registrar General of census are also made available for other Government Departments. The Committee set up by the Department of Electronics to go into the functioning of the computer systems in Government would also make recommendations on the nature of facilities to be set up for census operations and census data management.

(Department of Electronics No. 275(1)/76-DE, dated 25th August, 1976.)

Recommendation

In many cases, apparently, the choice of the system of configuration had also been largely left to supplier firms like IBM, who specialised in that has now been diagnosed by the Department of Electronics as the 'discipline of spoon-feeding'. All India Radio and the Registrar General of India left the task of designing the system almost entirely to IBM engineers whose main thrust had been in the areas of business applications rather than the purposes aimed at by Government. There are repeated instances of Government departments going in for equipment which was readily available, but they were lured, as it were, by the ready-made packages of hard-ware and soft ware offered by the foreign controlled companies operating in India. Thus, the systems acquired had not been designed to suit our individual user-requirements, but whatever was readily available with the manufacturers were virtually thrust on this country on account of the sophisticated and alluringly aggressive salesmanship of IBM in particular and the comparative technical inexperience of our individual users. This appears to the particularly true in the case of the IBM-1401 series, (of which there is a peculiar proliferation in government departments), which, by the time they were brought into India on an 'As is' basis and refurbished for being supplied to various users, were entirely obsolete and had outlived their utility elsewhere in the world.

[Sl. No. 7 (Para 2.47) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action taken

All India Radio did not acquire IBM-1401 series machines. They acquired only unit record machines as IBM 402 Accounting machine and 082 sorter, two punches and two verifiers in 1968. Even, before these IBM machines were purchased for Audience Research Unit in 1968, the Unit already had Power Sameas machines. These machines had outlined their life. Besides, they could take only 12,000 card passages per hour through the sorter and had 40 columns in a card. They became totally inadequate for the increased work. The IBM machines which were purchased in 1968, could take 39,000 card passages per hour with 80-column information. It is, however, true that detailed discussions had been held with IBM's representatives and the machines ultimately recommended by them were purchased, since the machines appeared to meet AIR's adequately requirements.

2. The 'AS IS' programmes of IBM relating to 1401 computers and Unit record equipment and similarly of ICL have been phased out, since these did not bring contemporary technology into the country or even give the cost advantages to the users, for using obsolete equipments. Various Government departments are now being encouraged to determine their own needs for computer applications through studies by their systems personnel and where adequate expertise does not exist, they are helped by the Department of Electronics and consultancy organisations in the Public and Private Sectors for help. Based on an analysis of the requirements as outlined, the actual configration is determined by the user organisation in consultation with the Department of Electronics.

[Department of Electronics No. 275 (1)-76-DE, dated 25th August, 1976.]

Recommendation

The Committee have also been informed by the Department of Electronics that while working out the financial implications of computerisation, the technological alternatives had not been critically gone into. The analysis made in this regard by the Information Planning and Analysis Group (IPAG) of the Electronics Commission is revealing. The analysis has shown that at the time of installing an IBM 1401 system or ICL 1901 system in the country, equivalent mini-computers were available with the same capacity at a cost which was half the cost in 1970, one-third the cost in 1972 and one-fourth the cost in 1974. In 1975, a computer slightly more powerful than the IBM 1401 was available at a cost as low as \$1200 for a 4000 word memory Central Processing Unit, as compared to the price of IBM 1401 of equivalent configration of \$20,000 or more. Thus, it would appear that little or no attention had been paid in the past to this 2109—4.

important aspect which could have, perhaps, resulted in the acquisition of equally capable equipment at much lesser cost.

[Sl. No. 8 (Para 2.48) of Appendix XIV to the 221st Report of the P.A.C. (Fifth Lok Sabha).]

Action Taken

The above stated analysis of costs of mini-computers equivalent in processing power to that of the IBM 1401 computer system is correct with regard to the Central Processing and Memory Units of the Systems. However, it is to be noted that most customers in India were also influenced by the consideration that the 1401 computers were available for purchase on a rupee-payment basis as compared with other mini-computer Central Processing and Memory Units that would have to be imported from abroad, with necessary foreign exchange clearances etc.

With reference to the future, there is currently a well-defined policy for import of computer systems where the best systems at the lowest prices to meet user needs alone are permitted, further, computer users are encouraged to be more innovative and import OEM (Original Equipment Manufacturer) products to enable them to take full advantage of available technological options and cost benefits through such innovations. The use of indigenous systems is encouraged in situations where they are considered suitable even though they are somewhat higher in price.

[Deptt. of Electronics No. 275(1)/76, dated 20 October 1976.]

Recommendation

The Committee would like to draw pointed attention to the thoughtful and perceptive observations made by the representatives of the Department of Electronics in his evidence before the Committee:

"The main point is that we have had to pay substantially more than otherwise would have been the case if we had paid dedicated attention to this area and shown something like the kind of interest and effort that the multinationals themselves put in terms of their marketing strategies and development."

[Sl. No. 9 (Para 2.49) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action Taken

Noted-We agree

The operation of multi-national companies in the country are being re-oriented to fall in line with what the Government would like them to do in the background of our national policies and priorities. The current programmes of foreign companies such as IBM and ICL in India are being restructed on such a basis.

[Department of Electronics No. 275 (1)-76-DE, dated 25th August, 1976.]

Recommendation

In evaluating the need for computerisation, the the Committee feel that it would be wrong to ignore another aspect which is the social cost of computerisation as well. While the Committee are sensible that our country must take every possible advantage of modern scientific advance and technological innovation, they would stress that in an economy such as ours, where the problems of unemployment is large scale and of serious proportions, the use computer and other sophisticated machines for traditional laboursaving applications may not be desirable or even expedient. The common argument that computers lead to efficiency which turn leads to profits larger savings and faster economic growth is, perhaps, valid only from a long-term point of view, while the use of computers for predominently labour-saving applications can well result in contracting the employment opportunities. It is unfortunate that adequate attention has not been paid to this important aspect in the past. The Committee desire that Government should invariably take into account the social cost of computerisation and evolve a principled and positive approach for the selection of areas for computerisation on an overall judgement in the national interest. [Sl. No. (Para 2.50) of Appendix XIV to 221st Report of the PAC (Fifth Lok Sabha).]

Action Taken

The Department of Electronics is endeavouring to determine the appropriatenes of computerisation to various application areas and processes, taking into account the techno-economic as well as social aspects. The Department has identified the following priority areas for utilisation of computers: vital sectors of national security (Defence), export-oriented applications; applications (technical studies, large scale statistical analysis production planning etc.) in nationally important sectors like agriculture, atomic energy; spacepower, oil, coal; steel and transportation; Research and Development; advanced computer training; production oriented (process con-

trol activities and commercial applications that can be demonstrated unambiguous to lead to efficient management where automation per se is not the objective. The last application area is examined more critically than normal to avoid pure labour-saving office automation.

To ensure that only automation appropriate to Indian conditions is promoted, the Department of Electronics has proposed a National Automation and Control Programme (NACPP,) based on the recommendations to the Planning Commission of the Panel on Control Components and the Panel on Industrial Drives and Controls constituted by the Electronic Commission. The proposal was later approved by the Planning Commission and Finance Ministry. One of the major objects of this programme is to make techno-economic analysis on all aspects of automation and control. The activities of NACP were initiated under the Imformation, Planning and Analysis Group in September 1975, and industrial sectoral surveys and analysis have been completed for Paper and Pulp, Fertiliser, Agriculture and Mining. Similar studies are in progress for sugar, tea, jute, leather and textile industries.

[Department of Electronics No. 275 (1)-76-DE, dated 25th August, 1976.]

Recommendation

What causes grave concern to the Committee is that, prior to 1970, there was no clear institutional mechanism within Government for coordinating the computer requirements of different Government Departments/agencies and even for evaluating the justification for computerisation The absence of an explicit policy-frame and well-defined criteria in regard to the areas and applications in which computers could and should be introduced further aggravated the situation. Even after, 1970, the Department of Statistics, entrusted with the responsibility of coordinating the purchase and hire of computers by Government departments, and of evaluating the requirements of user departments and ensuring proper utilisation of computer time, was, as pointed out earlier, not adequately equipped to consider these technological aspects. Now that the Department of Electronics has been entrusted with most of these vital responsibilities as a unifying agency, the Committee trust that there would be a more integrated and coordinated approach towards the entire question of computerisation in Government departments.

[Sl. No. 11 (Para 2.51) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action Taken

The Electronics Commission has laid down policies with regard to various aspects of computer technology such as. imports, industrial licensing, priority areas for use of computers, technology development, software exports, and the manufacturing programmes of foreign companies. The nature of these policies have been set down in some detail in Section 9 of the Annual Report of the Department of Electronics for 1975-76.

The following are some of the significant policy decisions and actions taken in this regard by the Electronics Commission:—

- (i) The Department of Electronics has been made responsible as the nodal Ministry of Government for coordinating the requirements of all users in the country relating to electronic data processing equipment and all matters concerning computer-based information systems and technology.
- (ii) Polices and administrative procedures for import of computers above the value of Rs. 5 lakhs, have been laid down.
- (iii) The configurations of computer systems for priority sectors such as, Defence, Oil, Agriculture, Steel, Atomic Energy, Planning, Industrial Production and Regional Computer Centres for specific applications as indicated by the users have been defined and clearances for import given.
- (iv) Programmes for the import of computers for export of software on the basis of guarantees, and by Indian nationals returning from/residing abroad, have been implemented.
- (v) Action regarding issue of industrial licences for programmable calculators, mini-computer periherals, micro-processor-based telecommunication systems and cash registers, and limited industrial licences for mini-computers, has been taken, this is a continuing process.
- (vi) Supply of computers by foreign computer companies operating here on the basis of refurbishing of used machines imported on an 'AS IS' basis, has been terminated.
- (vii) The programmes of foreign computer companies operating in India have been examined under Foreign Exchange Regulation Act and recommendations made for reduction of foreign equity to 40 per cent or discontinuance of all their current activities classified as trading, marketing, operation of data centres etc.
- (viii) Technology development contracts amounting in money terms to about Rs. 3 crores for the development of computer

hardware and software, have been given to public sector companies.

(ix) With assistance from United Nations Development Programme, a National Centre for Software Development and Computing Techniques has been set up at the Tata Institute of Fundamental Research. Bombay. A National Informatics Centre has been approved for implementation at New Delhi. A Regional Computer Centre at Calcutta is being set up.

[Department of Electronics No. 275 (1)-76-DE, dated 25th August, 1976.]

Recommendation

The Committee find that the Department of Electronics has so far been designated as the nodal point for scrutiny only in respect of Government departments. The Committee stress that all requests for introduction of computers above a certain value whether in the public or private sector, should be got scrutinised by the Department of Electronics which has the requisite expertise to make sure that such computerisation would subserve the larger public interest.

[Sl. No. 13 (Para 2.53) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action Taken

Under the Allocation of Business Rules as amended from 29 August, 1975, procurement of computers by all Departments whether through indigenous sources or through import are regulated by the Department of Electronics. The has approved of a special procedure whereby import of computers of the value of over Rs. 5 lakhs will have to be approved by a high-level committee consisting of the Chairman of the Electronics Commission, one Member of the Electronics Commission, Secretary, Department of Economic Affairs and Secretary of the concerned user Department. The question of regulation of introduction of computers above a certain value in the private sector that may be obtained through indigenous sources is being studied by the Government. This aspect is also related to the recommendations of the Automation Committee, that any investment on computers by any organisation in the country will have to be on the basis of an agreement between the Management and the labour.

[Department of Electronics No. 275(1)-76-DE, dated 25th August, 1976.]

Recommendation

The Committee are glad that the Department of Electronics are no longer just content with accepting the merits of a readymade machine which the Multinationals successfully marketed through their usual deft salesmanship but are now trying seriously to identify the areas and problems where the use of the computer would really be an aid in taking correct decisions after evaluating all the complex factors. Since the user Departments have hitherto got used to a certain amount of what might be called spoon feeding. by the Multinationals, it is necessary that a close watch is kept centrally by the Department of Electronics to ensure that the Department identify precisely and carefully the problems and areas proposed to be tackled by computerisation and also spell out the benefits which would accrue from computerisation.

[Sl. No. 14 (Para 2.54) Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action Taken

The Department of Electronics invariably obtains a detailed statement of case from potential user departments prior to accepting the need for any new computer facilities or for augmentation of the existing computer facilities. These statements of cases necessarily include an outline of the anticipated benefits and objectives of such facilities.

[Department of Electronics No. 275 (1)-76DE, dated 25th August, 1976.]

Recommendation

As regards the criteria to be followed for the scrutiny of computerisation proposals from different Government departments, the Committee note that certain broad principles have now been evolved by the Department of Electronics and that certain priority areas of applications which are export and production-oriented and would make for conservation of resources, foster indigenous development and R&D, etc., have been indicated.

According to Government the use of computers is primarily to be made in industrial process control, designing, scientific calculations, inventory control, defence system etc. Computers are also envisaged to be used for the process-oriented type of applications where they support essential improvements in industrial outputs in terms of controlling the process of improving the quality of the product and improving the throughout of the process areas.

In sum, the Committee would like a more precise policy and objective criteria for computerisation in Government Department to be evolved soon by the Department of Electronics so that a national line on this issue could be laid down for principled implementation.

[Sl. No. 15 (Para 2.55) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)].

Action Taken

The guidelines for determining area of priority in usage of computers whilst clearing various proposals for import and the criteria for usage of such imported computers have been spelt out in Chapter 9 of the Annual Report of the Department of Electronics, (1975-76).

A policy paper will be drawn up and implemented with the approval of the Electronics Commission.

[Department of Electronics No. 275 (1)-76-DE, dated 25th August, 1976.]

Recommendation

The Committee regret that their examination of this wide-ranging issue has brought out same distressing features. Except for a few instances, almost all Departments had purchased computers/data processing equipment directly and not procured them through the Director General of Supplies and Disposals, although the General Financial Rules and the provisions of the Manual of the Director-General of Supplies and Disposals, required such procurement to be made through DGS&D only. One of the common explanations advanced was that the computer and other data processing equipment obtained by the user Departments having been of a proprietory nature, it was not considered necessary to route their requirement through the DGS&D. The Secretary, Department of Supply, however, was good-enough to go on record before the Committee that even in the case of 'proprietory items' the user Departments should have asked DGS&D to procure it. The Secretaries of the Departments of Supply. Foreign Trade and Expenditure have also conceded that it was a mistake on the part of the user Departments to have ignored the existing procedure and they should not have resorted to direct procurement from the supplier firms without seeking special exemption from DGS&D.

[Si. No. 16 (Para 3.90) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)].

Action Taken

In terms of a Cabinet decision of 4th December, 1975, import of all computers costing more than Rs. 5 lakhs, will be approved by a high-level Approval Committee consisting of the Chairman, Electronics Commission, a Member of the Electronics Commission, Secretary, Department of Economic Affairs and the Secretary of the user Department concerned. As a prelude to such approval, the Department of Electronics will be the agency responsible for drawing up the system specifications in consultation with the user on the basis of the user's justification. The Department of Electronics will also obtain quotations for the systems to meet specifications as drawn up and set up by appropriate Evaluation Committees. Orders for supply will be placed by the respective user Ministries. Under this policy, the earlier procedure of procurement through DGS&D has been discontinued.

[Department of Electronics No. 275(1)|76-DE, dated 25th August 1976.].

Recommendation

Another somewhat disconcerting feature of the multifacet story of Government's acquisition of computers is that barring a few Ministries all others had procured the computer/data processing equipment without floating any tenders on the plea that such items were of a proprietory nature. The exceptions have been (1) The P&T Department who obtained the computer from Elliot Bros., after floating global tenders, (2) Chief Controller of Imports and Exports. (3) Overseas Communication Service, (4) Department of Commercial Intelligence and Statistics whose tender enquiries, however, were restricted only to International Business Machines and International Computers Limited. The Committee recall that during evidence, the Secretary, Ministry of Communications vouchsafed his opinion based on the experience gained in their own purchases, that by inviting global tenders better terms than those given by International Business Machines could have been obtained.

[Sl. No. 17 (Para 3.91) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action Taken

Acquisition of computers on the plea of being proprietory items should be exceptional. Such exceptions can be for reasons of very specialised application areas (e.g., Siesmic Data Processing), Real-

time Operations for which only one vendor may be identifiable, availability of Specialised software, or hardware (eg., as Array Processors, etc), and in cases of projects of highly confidential nature from the view point of national security. As a general rule, procurement in computers is now being done on a competitive tender basis only.

[Department of Electronics No. 275(1)|76-DE, dated 25th August, 1976.]

Recommendation

From the information furnished by various Departments, it appears that except for a few recent acquisitions reliance has been placed almost entirely on the western countries and the markets in the socialist countries have not been adequately explored. The representative of the Department of Electronics during his evidence admitted that this had perhaps been due to gaps in the information available to Government till 1972 about computers/data processing equipment that could be procured from the USSR. This does not seem particularly valid, since Indo-Soviet relations have been growing over the years and a Soviet computer appears even to have been presented to the Indian Statistical Institute during the fifties. It is needless also to point out that purchases from the USSR and the socialist countries of East Europe had the additional advantage of being covered by bilateral trade agreements. The Committee trust that the Department of Electronics will in future, while processing the requisitions for procurement of such computers/data processing equipment for Government Departments as are not manufactured within the country, would explore the possibility of importing them on competitive terms from countries including USSR and other socialist countries.

[Sl. No. 19 (Para 3.93) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action Taken

As a matter of standard procedure, all invitations to tender for supply of a computer through import are sent to all known computer suppliers represented in the country. This includes computer manufacturers (or their agents in India) from USSR and other socialist countries also.

[Department of Electronics No. 275(1)|76-DE, dated 25th August 1976.]

Recommendation

The representative of the Department of Expenditure in defence of the procedure followed by the Departments in purchasing/hiring computers, data processing equipments etc. directly from IBM/ICL stated during the course of evidence:

"If we now consider that they did not have enough knowledge of computer technology or that they did not know computer software well enough and they allowed themselves to be spoon-fed by IBM salesmen, the Finance Ministry was certainly in no better position to adjudicate between one proposed computer sstem and another.... by hind sight or better analysis now we say that if in 1968 a suitable group of computer specialists had been got together to analyse the alternative software systems and then gone out to a world bid and taken an Italian or British computer, we might have saved 50 per cent of the money over the period. It is in that way that the Committee notices a lapse. If that is so, I think this must be true, but the amounts involved though substantial were not so large that in every case it was necessary for such an elaborate procedure to be adopted to find out possible alternative world sources."

[Sl. No. 20 (Para 3.94) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action Taken

The correct position was explained in detail to the Committee by a representative of the Ministry of Finance in the course of his oral evidence. The Ministry of Finance has, therefore, nothing more to add to the submissions already made to the Committee.

[Ministry of Finance, Department of Expenditure O.M. No. F' 12 (31)-E(Coord)/75, dated 13th August, 1976).]

Recommendation

While the representative of the Ministry of Finance may well feel called upon to defend the action taken by his predecessors, the fact remains that there have been many serious loopholes in the matter of processing the requests of Government departments/Ministries/organisations for acquisition of computers, data processing machines etc. Quite a number of such examples have come to the notice of the Committee, only a few of them being mentioned below:

(1) As already mentioned in Chapter II no clear-cut guidelines for determining the necessity or otherwise of computer, data processing

machines etc. had been laid down. The result was that justifications were prepared and processed in an 'ad-hoc' manner with the result that 'captive' computers have come to be procured for departments. Ministries where the work-load hardly justifies them, e.g., Registrar-General of India, Heavy Vehicles Factory, Avadi, Vehicle Factory, Jabalpur etc. (For details please see Chapter IV).

- (2) The feasibility of utilising the facility in a common computer centre, or in conjunction or in association with other user departments does not appear to have been critically gone into. For example, the requirements of U.P.S.C. and the Institute of Secretariat Training and Management, New Delhi (which work under the Department of Personnel) could have been served by one data processing facility.
- (3) The requirements were not spelt out in broad specific terms to facilitate determination, by an expert Government agency/department, the number and type of units including data processing equipment, software etc. which should go to make up the computer system so as to minimise the capital and recurring cost.
- (4) The Government departments did not take any concerted or determined measures to go into the reasonableness of the terms of agreement for purchase/hire of computers as offered by IBM/ICL. In this context the Committee would like to point cut the astonishing instance where the charges for computers were allowed to be specified in American dollars with the result that heavy amount of Rs. 20 lakhs had to be paid by the Railways and other Government departments after devaluation of the rupee in 1966 till the position was rectified in 1968 at the instance of the Comptroller and Auditor General who had insisted that the charges should be expressed in terms of Indian currency. This was a glaring example of an expenditure which could and should have been saved by the exercise of proper care and forethought.

[Sl. No. 21 (Para 3.95) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)].

Action Taken

Currently, procurement of computers are approved on the basis of guidelines for determining necessity or otherwise for which detailed justifications are required. The feasibility of utilising other available computer facilities are taken into account before clearances for additional new facilities are given. The requirements are also

being spelt out in sufficient details for a proper evaluation of the proposed system configuration to be done. Quotations are obtained by Department of Electronics from a large number of computer manufacturers and the cheapest suitable system recommended. The terms of agreement for purchase and for installation, warranty etc., are stipulated in contracts which have been drawn up by the Department of Electronics in consultation with the Ministry of Law and major user departments, Examples of the type quoted above by the Public Accounts Committee will not recur.

[Deptt. of Electronics No. 275(1)/76-DE. dated 25th August, 1976.]

ANNEXURE I

No. F.1(6)-E.II(A)/76

GOVERNMENT OF INDIA/BHARAT SARKAR

Ministry of Finance/Vitta Mantralaya

(Department of Expenditure/Vyaya Vibhag)

New Delhi, the 6th January, 1977. 16th Pausa, 1898 (Saka).

OFFICE MEMORANDUM

SUBJECT.—Observations made by the Public Accounts Committee (1975-76) (5th Lok Sabha) in paragraph 3.95(4) of the 221st Report in regard to computerisation in Government Departments.

The undersigned is directed to refer to the observations made by the Public Accounts. Committee in sub-para 4 of paragraph 3.95 of their 221st Report referred to above which is reproduced below for facility of reference:—

"3.95(4): The Government Departments did not take any concerted or determined measures to go into the reasonableness of the terms of agreement for purchase/hire of computers as offered by IBM/ICL. In this context the Committee would like to point out the astonishing instance where the charges for computers were allowed to be specified in American dollars with the result that heavy amount of Rs. 20 lakhs had to be paid by the Railways and other Government Departments after de-

valuation of the rupee in 1966 till the position was rectified in 1968 at the instance of the Comptroller and Auditor General who had insisted that the charges should be expressed in terms of Indian currency. This was a glaring example of an expenditure which could or should have been saved by the exercise of proper care and fore-thought."

- 2. The above observations of P.A.C. have been given due consideration by this Ministry in consultation with the Department of Electronics. According to provisions contained in rule 14(1) of the General Financial Rules, 1963, no contract involving an uncertain or indefinite liability or any condition of an unusual should be entered into without the previous consent of the Finance Ministry. Thus the guiding principle to be observed while entering into contracts or agreements involving expenditure from funds in all cases is to ensure that no uncertain or indefinite liability or any condition of an unusual character, as has happened in the cases referred to in P.A.C.'s Report, should be entered into. It is accordingly requested that while entering into a contract/agreement for any purchase or hire of any article required for the public service, the reasonableness of the terms of such contract/agreement should be looked into with adequate care and in no case such terms so drawn up should be expressed in foreign currency.
- 3. While the above general principle should be applicable to Computer Machines also, it may be mentioned that under the Allocation of Business Rules, procurement of computers by all the Departments of the Government of India whether from indigenous source or through import is regulated by the Department of Electronics. The terms of general agreement for purchase and installation, warranty etc. are stipulated in contract forms which have been drawn up by the Department of Electronics in consultation with the Ministry of Law and major user Departments. vised procedure evolved by the Department of Electronics purchase and for installation etc. also stipulates that the tenders are to be called by that Department, who will scrutinise the tenders received and approve the system to be purchased. After the approval of the system, the user Departments are required to draw up a suitable contract document stipulating the various terms contracts, if the conditions stipulated in the general agreement already drawn up as referred to above are not considered appropriate, in consultation with the Ministry of Law and Department of Electronics. This procedure may be kept in view while entering into contracts for the purchase/hire of computer machines. In

this connection, attention is also invited to the instructions issued by the Department of Electronics in their letter dated 8th April, 1975 regarding purchase of computers etc. entailing an outlay of Rs. 5 lakhs or less c.i.f. in foreign exchange and the policy guidelines laid down by that Department in regard to import of computer system over a value of Rs. 5 lakhs c.i.f.

- 4. An amendment to General Financial Rules, 1963 is enclosed.
- 5. Hindi version of this Office Memorandum is also enclosed.

(S. K. DAS)
Under Secretary to the Govt. of India.

To

All the Ministries/Departments of the Government of India. etc. etc.

AMENDMENT TO THE GENERAL FINANCIAL RULES (REVISED AND ENLARGED), 1963

No.

Page 8.

Chapter 2.

Rule 14.

Insert the following as Government of India's decision below this rule:—

"Government of India's decision: While entering into a contract/agreement for any purchase or hire of any article required for the public service, the reasonableness of the terms of such contracts/agreements should be looked into with adequate care and in no case such terms so drawn up should be expressed in a foreign currency. So far as purchase of computer machines i.e. computer programmable, calculators, mini computers etc. are concerned, policy guidelines for import of computers have been laid down by the Department of Electronics for import of computer system over a value of Rs. 5,00,000/- c.i.f. and the procedures to be followed in respect of these machines entailing an outlay of Rs. 5,00,000/- or less c.i.f. in foreign exchange are laid down in Department

of Electronics' letter No. 1/IC/75, dated 8 April, 1975. While these instructions should invariably be followed in the matter of purchase of these computer machines. the terms of general agreement for purchase and installation, warranty etc. are stipulated in contract forms which have been drawn up by the Department of Electronics in consultation with the Ministry of Law and major user Departments. The tenders are also to be called by the Department of Electronics who will scrutinise the same when received and approve the system to be purchased. After the approval of the system by that Department, the user Departments will draw up suitable contract document stipulating various terms of contracts, if the conditions stipulated in the general agreement already drawn up are not considered appropriate, consultation with the Ministry of Law and the Department of Electronics."

[Ministry of Finance O.M. No. F.1(6)-E.II(A)/76, 6th January, 1977).]

ANNEXURE II

No. F.1 (6)-E.II (A)/76

GOVERNMENT OF INDIA

Ministry of Finance

(Department of Expenditure)

New Delhi, the 26th October, 1977. 4th Kartika, 1899 (Saka).

OFFICE MEMORANDUM

Subject.—Computerisation in the Government Departments—Clarification regarding.

The undersigned is directed to refer to para 2 of this Ministry's O.M. of even number dated the 6th January, 1977 on the subject noted above, according to which, while entering into a contract/agreement for any purchase or hire of any articles required for the public service, the reasonableness of such contract/agreement are

required to be looked into with adequate care and in no case such terms so drawn up should be expressed in foreign currency. A doubt has been raised whether it would be possible to have such terms of purchase/hire expressed in Indian currency in cases where for the off-shore purchase of computers etc., global tenders are invited. In such cases the suppliers are hesitant to have the payment terms expressed in Indian currency.

2. The matter has been examined carefully in consultation with the Department of Electronics and the Comptroller and Auditor General of India. It has now been decided that, for para 2 of the O.M. dated 6th January, 1977, the following shall be substituted:—

"The above observations of the Public Accounts Committee have been given due consideration by this Ministry in consultation with the Department of Electronics. According to provisions contained in rule 14(1) of the General Financial Rules 1963, no contract involving an uncertain or indefinite liability or any condition of an unusual character should be entered into without the previous consent of the Finance Ministry. Thus the guiding principle to be observed while entering into contracts or agreements involving expenditure from public funds in all cases is to ensure that no uncertain or indefinite liability or any condition of an unusual character. happened in the cases referred to in the Public Accounts Committee's Report should be entered into. It is accordingly requested that while entering into a contract/agreement for any purchase or hire of any articles required for the public service, the reasonableness of such contract/ agreement should be looked into with adequate care and in no case such terms so drawn up should be expressed in foreign currency if the transaction relates to purchase/ hire of machines within the country from foreign companies In other words, while it will be mandatory to have payments terms in the contract expressed in Indian currency in respect of transactions originating within the country relating to outright sale or hire/lease by foreign companies operating in India, the payment terms may be expressed in foreign currency if quotations are received and payments insisted on in their currency by the foreign suppliers in respect of 'Off Shore' transactions."

3. This may be brought to the notice of all authorities subordinate to the Ministry of Home Affairs etc. for strict compliance.

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- 4. An amendment to the Government of India's decisions below Rule 14 of General Financial Rules, 1963 is enclosed.
 - 5. Hindi version of this Office Memorandum is also enclosed.
 (S. K. DAS)

Under Secretary to the Govt. of India.

To

All the Ministries/Departments of the Government of India, etc. etc.

Amendment to the General Financial Rules (Revised and Enlarged), 1963

Page 8. Chapter 2. Rules 14.

Substitute the following for the existing Government of India's decision inserted below this rule vide O.M. No. F.1(6)-E.II(A)/76, dated 6th January, 1975:—

"Government of India's decision.—While entering into a contract/agreement for any purchase or hire of any article required for the public service, the reasonableness of the terms of such contracts/agreements should be looked into with adequate care and in no case such terms so drawn up should be expressed in a foreign currency if the transaction relates to purchase/hire of machines within the country from foreign companies. In other words, while it will be mandatory to have payments terms in the contract expressed in Indian Currency in respect of transactions originating within the country relating right sale or hire/lease by foreign companies operating in India, the payment terms may be expressed in foreign currency if quotations are received and payments insisted on in their currency by the foreign suppliers in respect of 'Off Shore' transactions. So far as purchase of computers etc. are concerned, policy guidelines for import of computers have been laid down by the Department of Electronic for import of computer system over a value of Rs. 5,00,000/c.i.f. and the procedures to be followed in respect of these machines entailing an outlay of Rs. 5,00,000/- or less c.i.f. in foreign exchange are laid down in Department of Electronics' letter No. 1/IC/75, dated 8th April, 1975. While these instructions should invariably be followed in

the matter of purchase of these computer machines, the terms of general agreement for purchase and installation, warranty, etc. are stipulated in contract forms which have been drawn up by the Department of Electronics in consultation with the Ministry of Law and major user Departments. The tenders are also to be called by the Department of Electronics who will scrutinise the same when received and approve the system to be purchased. After the approval of the system by that Department, the user Departments will draw up suitable contract document stipulating various terms of contracts, if the conditions stipulated in the general agreement already drawn up are not considered appropriate, in consultation with the Ministry of Law and the Department of Electronics."

[Min. of Finance (Deptt. of Expenditure)'s O.M. No' S.1(6)-E.II (A)/76, dated 26-10-1977).]

Recommendation

The Committee desired to know whether the reasonableness of the terms offered by IBM/ICL had been gone into by the Departments before signing the Agreements. Replies received from some of the departments frankly admit absence of any such scrutiny. For example, the Department of Commercial Intelligence and Statistics stated: "No attempt has been made in the past to examine in detail the reasonableness of the terms and conditions of the contract before the agreements were concluded. The terms and conditions of the supplying firms have been accepted since it was said that they were the same to the customers throughout India". The Overseas Communications Service has stated "No legal opinion was sought for before entering into the agreements with IBM. At that time it was not considered necessary to do so on the basis that other users Government Departments and Public Sector Undertakings had accepted similar standard terms and conditions offered by JBM". The DGS&D has stated: "There was no attempt made to examine in detail the reasonableness of the terms and conditions".

[Sl. No. 22 (Para 3.96) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action Taken

1. With regard to the part, the Comments of the Public Accounts Committee as above are noted. However, an Inter-Ministerial Committee consisting of representative from the Department of Electronics, Ministry of Finance (Cost Accounts Branch), Reserve Bank of

India and DGTD has gone into the question of reasonableness of prices and hire rates charged by IBM and to obtain reductions as necessary.

2. According to the procedure for import of computers now in force, calls for tenders are issued by the Department of Electronics. After scrutiny of the tenders received and approval of a specific system for purchase and negotiation of the price for this, user departments draw up contract documents stipulating the various terms of the contract in consultation with the Ministry of Law and the Department of Electronics.

[Deptt. of Electronics No. 275(1)/76-DE, dated 25th August, 1976.]

Recommendation

It was therefore only natural that the powerful multinationals should have taken full advantage of this extraordinary complacency and apathy on the part of the user Government Departments. Apparently, the aggressive and also skilful salesmanship of the formidable multinationals persuaded them to go in for hiring of computer systems, the hard core of which largely consisted of outmoded and used machines in 1401 series which were only spruced up and refurnished and hired out at a fabulous margin of profits. The Committee would like to point out that when the Railway Board in 1974 and 1975, in pursuance of the recommendation of the Public Accounts Committee, took up seriously with IBM the revision of hiring charges for the computers, they were able to effect to begin with, a reduction in annual recurring rental charges to the extent of Rs. 11 lakhs in November, 1974, followed by a further reduction of Rs. 19 lakhs in May, 1975. This is a pointer not only to the Railway's earlier lack of care but also to the fact that by a meaningful and determined cffort. Government, which had at its disposal the expertise of the Department of Electronics the Electronics Corporation of India, Research Institutions, and the Cost Accounts Branch of the Ministry of Finance, could and should have been able to fix reasonable charges for acquisition of computers right in the beginning and avoided the costly lapses which have burdened the country's exchequer.

[Sl. No. 23 (Para 3.97) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action Taken

The Inter-Ministerial Working Group on Computers has held negotiations during 1976 with IBM with regard to conversion of hire agreements with users into outright sale. This has also been related to the excess charged by IBM when the hire charges in India were

enhanced because the charges were specified in US Dollars and there was devaluation of the rupee in 1966. IBM have proposed certain basis of termination of hire which is under consideration. As a matter of policy, all imports of computers and other equipments are now obtained on the basis of outright purchase only.

[Deptt. of Electronics No. 275(1)/76-DE, dated 25th August, 1976.]

Recommendation

While examining the representatives of the Government Departments on the pros and cons of hiring vis-a-vis purchase of computers/data processing machines, the Committee came to know of certain apprehensions voiced by the user Departments. For example, the Overseas Communications Service has stated that "the capital investment on outright purchases is too high", while DGS&D have drawn attention to "budgetary restrictions" as a reason for during the machine

[Sl. No. 24 (Para 3.98) of Appendix to 221st Report of PAC (Fifth Lek Sabha)].

Action Taken

The Electronics Commission had decided in 1971 that in respect of computers imported into the country from abroad, procurement would be through outright purchase only. However, with regard to Unit Record Machines and computers available from within the country, users continued to exercise options between hiring and purchase, essentially based on their analysis of the pros and cons. The advantages that have been usually put forward for hiring are:—

- (i) there is no need for initial capital outlay;
- (ii) the equipment can be returned if the need decreases or is initially known to be for a short duration; and
- (iii) it is possible to return the equipment and obtain newer systems with improved performance and cost-benefit ratios. These advantages do apply significantly in countries such as the U.S.A., but are much less relevant in the Indian Context.

In terms of the FERA guidelines applicable to foreign equity companies in India, companies operating with higher than 40 per cent equity would not be permitted to engage in internal tradning and commercial activities (such as hiring). Thus, activity of hiring of data processing machines will be precluded from the activities of IBM and ICL under FERA unless they restructure the company's equity status to bring the foreign equity to below 40 per cent.

[Deptt. of Electronics No. 275(1)/76-E, dated 10th November, 1976.]

Recommendation

The representative of the Department of Electronics hinted at larger problems when he stated during evidence that "hiring seems to be an expense which can be incurred whereas investment on computers by outright purchase calls for certain additional levies etc., in terms of taxes". While this question cannot at this point be discussed at any depth, the Committee are of the view that the Ministry of Finance should have taken critical note of whatever fiscal constraints were there and should have sought to resolve them to the extent possible.

[Sl. No. 25 (Para 3.99) of Appendix XIV to 221st Report of P.A.C. (Fifth Lok Sabha)]

Reply

The observations of the Committee have been noted and brought to the notice of all the Financial Advisers for information and further guidance vide this Ministry's O.M. No. F. 12(31)-E(Coord)/76, dated the 18th March, 1977. (Annexure)

[Ministry of Finance (Department of Expenditure) O.M. No. F. 12(31)-E(Coord)/76, dated the 18th March, 1977]

ANNEXURE

No. F.12 (31)-E (Coord)/76

Government of India

MINISTRY OF FINANCE

Department of Expenditure

New Delhi, the 18th March, 1977

OFFICE MEMORANDUM

The undersigned is directed to invite attention to Recommendation No. 25 (Para 3.99) of 221st Report of the Public Accounts Committee (Fifth Lok Sabha) reproduced below:—

"The representative of the Department of Electronics hinted at larger problems when he stated during evidence that "hiring seems to be an expense which can be incurred whereas investment on computers by outright purchase calls for certain additional levies etc. in terms of taxes". While this question cannot at this point be discussed at any depth, the Committee are of the view that the Ministry of Finance should have taken critical note of whatever fiscal constraints were there and should have sought to resolve them to the extent possible."

2. The above recommendation/observation of the Public Accounts Committee is brought to the notice of all Heads of Divisions in the Department of Expenditure and all Financial Advisers for information and guidance.

J. P. DAS,

Joint Secretary to the Government of India.

To

All Heads of Divisions in the Department of Expenditure and all Financial Advisers.

Recommendation

The attention of the Committee has been drawn to the expertise required for keeping the computer system in serviceable condition and the high cost demanded by the multinationals for spares. The Committee feel that if Government had taken serious note of these and other allied difficulties it should have been possible, with the help of the Department of Electronics/Electronics Corporation of India, to devise suitable servicing arrangements as most of the computers in operation are supplied by one company and are located in Delhi. It should not have been too difficult also to persuade the multinationals with the help of factual data about the imported cost of spares, to charge no more than reasonable prices for the parts required.

[Sl. No. 26 (Para 3.100) of Appendix XIV to 221st Report of P.A.C. (Fifth Lok Sabha)]

Action Taken

With the setting up of the Computer Maintenance Corporation (a public sector undertaking under the Department of Electronics), a close watch will be kept on the procedures for servicing (which will gradually be taken over by this Corporation in the case of all imported computer systems) and for acquisition of Spare parts, and to ensure that costs of spare parts are reasonable.

[Deptt. of Electronics No. 275(1)/76-DE, dated 25th August, 1976.]

Recommendation

The Committee would like Government to take concerted measures without further delay, so that all constraints in the way of a rational decision about the purchase, instead of hire, of computers, system are eased out in the country's interest.

[Sl. No. 27 (Para 3.101) of Appendix XIV to 221st Report of P.A.C. (Fifth Lok Sabha)]

Action Taken

A study on generalised basis on the rationale for purchase/hire of systems taking into account aspects as manufacturers rates of rental and sale prices, purchasers rate of return on invetment, nature and useful duration of applications is being carried out. Broad guidelines on the subject will be evolved. As a matter of policy, all imports of computers are on the basis of outright purchase only. Procurement of facilities on the basis of hiring will be resorted to only on the basis of a detailed scrutiny. Hiring will not be permitted from the foreign majority equity Companies under Foreign Exchange Regulation Act.

[Deptt. of Electronics No. 275 (1) /76-DE, dated 25th August, 1976]

Recommendation

One of the chief arguments given in support of the concept of hiring is that the machine could be replaced at any time or dispensed with. This provision in the Agreement should be put to effective use by undertaking a critical review of the use to which the existing computers, data processing equipment, etc. have been put. The Committee have elsewhere recommended that computer and other sophisticated machines in a situation like ours should be pressed into service only where these are required in the interest of scientific advancement or technological and production gain but never merely as a labour saving device.

[Sl No. 28 (Para 3.102) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action Taken

We agree with the last sentence of the Public Accounts Committee in the above recommendation. A critical review of the use to which the existing computers, data processing equipment, etc., are put to in Government has been entrusted to a specialist committee and depending on the findings of the Committee, appropriate action will be taken.

[Deptt. of Electronics No. 275(1)/76-DE, dated 25th August, 1976]

Recommendation

The Committee, therefore, urge that the use of computers, data processing equipment, etc., may be given up where it does not conform to the aforementioned criteria. Where, however, the equipment is required in the larger public interest, a detailed analysis should be carried out about the units required for working the The effort should also be to procure computer, data processing equipment, etc., from public sector units, (e.g., the Electronics Corporation of India) who have already developed a fair amount of capability in manufacturing and marketing such equipment. this context the Committee would like to draw attention to the wellknown fact that there is still a high margin of profits available to the multi-nationals in the peripheral and supporting equipment. The Committee need hardly point out that with the advancement of knowledge as well as what is termed 'know-how' and technical capability in the country, it should be possible to replace, largely if not entirely, at least the data processing equipment and other peripheral and supporting equipment by that of indigenous manufacture, preferably from the public sector.

[Sl. No. 29 (Para 3.103) of Appendix XIV to 221st Report of P.A.C. (Fifth Lok Sabha)]

Action Taken

The Technology Development Council of the Electronics Commission had funded a project for exploitation of the capability of the TDC-12 computer manufactured by the Electronics Corporation of India to meet Data Processing applications carried out on Unit Record Equipments and some of the IBM 1401 computers. The TDC-312 and TEC-316 programmes and the mini-computer programme would enable replacement of the Unit Record Equipments and the obsolescent computers. A Committee to review the used of computers in Government has been set up. This Committee will be guided by this recommendation in its deliberations.

[Deptt. of Electronics No. 275(1)/76-DE, dated 25th August, 1976]

Recommendation

Where, however, it is not possible to replace the equipment by indigenous production, Government should examine in depth, with the help of the Department of Electronics and the Ministry of Finance (Cost Accounts Division), whether it would be more advantageous to purchase the needed equipment outright rather than

hire it. Wherever it is found necessary to purchase the equipment outright, it should be procured from indigenous firms as already recommended earlier. But where it has to be imported, tenders should be invited from well-known and reliable suppliers of proven standing. Competitive quotations should be called for before selecting the best equipment on the basis of performance, economics, etc.

[Sl. No. 30 (Para 3.104) of Appendix XIV to 221st Report of P.A.C. (Fifth Lok Sabha)]

Action Taken

Negotiations for conversion of hiring options into purchase have been carried out with IBM and ICL. These options will be given effect to whilst approving the future programmes of these two companies under the Foreign Exchange Regulation Act. Replacement of unit record equipments and obsolescent computers though indigenous equipment will also be restored to. With regard to import of computer system procedures exist for obtaining competitive tenders and selections are made on the basis of performance and purchase finalised through negotiations on the prices.

[Deptt. of Electronics No. 275 (1) /76-DE, dated 25th August, 1976]

Recommendation

Where it is considered desirable to continue to retain the equipment on hire, the terms should be most carefully scrutinised with the help of the Department of Electronics and the Ministry of Finance (Cost Accounts Division) so as to secure the most competitive rates. As mentioned earlier the Railway Board have been able to renegotiate the terms for hiring of computers and equipment with the IBM in pursuance of the Committee's recommendations and thereby secured a significant saving of about Rs. 30 lakks per annum.

[Sl. No. 31 (Para 3.105) of Appendix XIV to 221st Report of P.A.C. (Fifth Lok Sabha)]

Action Taken

As a matter of policy the computers on hire are being phased out. If however, hiring is found to be inescapable in special circumstances, this will be done only after a proper and complete assessment from the technical and costing angles.

[Deptt. of Electronics No. 275 (1) /76-DE, dated 25th August, 1976]

Recommendation

The Committee would like to be informed of the precise action taken in pursuance of these recommendations in respect of computers, data processing equipment, calculating machines, etc., which are in operation in various Government Departments/Ministries.

[Sl. No. 32 (Para 3.106) of Appendix XIV to 221st Report of the PAC (Fifth Lok Sabha)]

Action Taken

A summary of action taken on the salient recommendations as above are as follows:—

- (a) The Electronics Commission decided in 1971 that future procurement, through import, of all computer system will be through outright purchase instead of hire.
- (b) The Inter-ministerial Committee set up by the Department of Electronics for determining the prices and rentals charged by IBM and ICL has held negotiations with IBM and ICL for conversion of the existing arrangements of hiring of computers into purchase options. IBM has offered to transfer ownership of all their system currently on hire on a certain basis and the decision of the Government will be communicated to IBM. ICL has offered to transfer the current systems on hire to ICIM which should become a 60 per cent majority Indian company.
- (c) A Committee has been set up to caary out an analysis of computer system in Government. This Committee will make recommendations about the need for giving up of some of the current applications, if these do not conform to the criteria of necessity. In cases where systems are found justifiable, specific options of purchase hire will be analysed in consultation with the Cost Accounts Officer in the Department of Electronics.
- (d) With regard to further acquisition of computers in Government the advantages of hiring or purchase of computers will invariably be assessed before giving clearances for

- procurement through hiring. Hiring will not be permitted from foreign majority equity companies under Foreign Exchange Regulation Act.
- (e) The Department of Electronics is now carrying out a detailed analysis of hiring and purchase options and guidelines on the subject would be issued for the benefit of the users.

[Department of Electronics No. 275 (1) /76-DE, dated 25-8-1976]

Recommendation

The Committee stress that Government should issue clear guidelines to the effect that all future requirements for computers, data processing equipment, etc., would first be got examined in the Department of Electronics with reference to the criteria laid down. Where it is considered absolutely essential in public interest to go in for computers, data processing equipment, etc., these should be preferably procured from the public sector units and failing that from indigenous firms. Where computers, data processing equipment, etc., are to be purchased or hired from a multi-national, this may only be done centrally by the Department of Electronics who may be assisted suitably by the Cost Accounts Branch of the Ministry of Finance.

[Sl. No. 33 (Para 3.107) of Appendix XIV to 221st Report of PAC (Fifth Lok Subha)]

Action Taken

All established user requirements are to be met by computers available through indigenous manufacturing programmes. There are currently no computers manufactured in India by multinational companies. No new hiring of Computers from multinationals is permitted.

2. Import of computers will be resorted to only if the indigenously available computers will not be able to meet the requirements of applications as considered high priority and inescapable. Guidelines with regard to import of computers have been issued to all Ministries/Departments through Circular No. 18(18)/76-DE dated 2nd March, 1976 (Annexure).

[Department of Electronics No. 275 (1) /76-DE, dated 25-8-1976]

ANNEXURE

DEPARTMENT OF ELECTRONICS GOVERNMENT OF INDIA

Policy Guidelines for Import of Computers

(As Approved by the Cabinet on 4th December, 1975)

The procedure as outlined below will be implemented by the Department of Electronics for import of computer systems over a value of Rs. 5 lakhs c.i.f.

(a) Step-I (Action by users)

Each user will outline the application for which a computer system has to be obtained through import, is necessary. On the basis of such defined usage, the user will draw up functional specifications, based on his current and anticipated applications. In the case of general-purpose Government user such as Customs, Income-tax, Audit and Insurance, with offices/units located in Delhi, and which are either already using the Computer Centre of the Department of Statistics or can be expected, in terms of their requirements, to do so in the future, the Department of Statistics will be consulted, as necessary.

(b) Step-II (Action by Department of Electronics)

The justification for the applications envisaged, in terms of national priorities as laid down by the Electronics Commission from time to time, and the related specificatons, will be scrutinised by the Department of Electronics (Computer Directorate); the Department will approve, in principle, the need for the import of a computer system with a certain functional configuration, which as a result of the technical scrutiny, may be different from that proposal by the used. The user would also be associated in deciding upon the functional configuration and convinced of the necessity of the change should any be considered necessary.

(c) Step-III (Action by Department of Electronics)

After such a clearance, in principle, the Department of Electronics will obtain competitive sealed tenders from various manufacturers/agents.

- (d) Step-IV (Recommendations by Expert Committee)
 - The Department of Electronics will constitute a Committee of Experts consisting of hardware/software and system specialists, for evaluating the tenders and making a technical recommendation thereon. Specialists from the user organisation will be invited to meetings of this Committee. Prior to initiating the evaluation, the user will be asked by the Department of Electronics to provide the Committee, a ranking of his preferences of computer types, together with his reasons for such a ranking.
 - (e) Step-V (Approval by Approval Committee).—The recommendations of the Committee of Experts will be put up to an Approval Committee consisting of:—
 - (i) Chairman, Electronic Commission—Chairman,
 - (ii) A Member of the Electronics Commission—Member.
 - (iii) Secretary, Department of Economic Affairs-Member.

In addition, the Secretary of the Department of which the user organisation is a part or is administratively associated, will be co-opted to the Approval Committee, when cases concerning those user organisations are taken up. In case the user department does not agree, the decision of the Approval Committee will be final.

- Contracts for the computer finally chosen will be placed by the user organisation concerned.
- (f) For computers imported under the above policy guidelines, clearance from the indigenous angles and other functions, normally discharged by the DGTD, will be handled by the Department of Electronics.
- (g) The procedure outlined above will not apply to computers, programmable calculators, mini-computers, etc., entailing an outlay of Rs. 5 lakhs or less c.i.f., in foreign exchange for which existing Government procedures will continue vide letter No. 1/EC/75, dated April 2, 1975 from Secretary, Electronics Commission to all Secretaries of the Government of India.

NOTE:

(i) The functioning of the procedure will be reviewed after a period of two years.

(ii) The time taken for finalising the specification and evaluating the tenders under this procedure should not exceed three months.

Recommendation

The Committee had learnt, with some consternation, in 1974 that the utilization of computers in the Railways was far less than originally envisaged and that the computers were not subserving the objectives with which they had been acquired. After scrutinising the action taken by the Railways in pursuance of their recommendation the Public Accounts Committee observed in their 165th Report (April, 1975):

"Keeping in view the wider ramifications of the purchase hire of computers etc. from these companies and the unsatisfactory utilisation of these machines as has been revealed by a study of the Railways' computerisation projects, the Committee desire that the Ministry of Finance should immediately set up a committee of experts to examine how far the Government Departments which have incurred huge expenditure on acquiring these costly machines have been able to put them to worthwhile and adequate use." The representative of the Department of Electronics stated during evidence in December, 1975, that the question of constituting the aforesaid Expert Committee was still, however, "actively", under consideration. The Committee have not yet been youch safed the final action, if any, taken in the matter. They are thus driven to reiterate that the Expert Committee should be constituted forthwith and should include, apart from experts in the field, a representative of the Cost Accounts Branch of the Ministry of Finance and at least one highly competent and independent person well-versed in the use of computers and data-processing machines by Government for administrative, organisation and other related purposes. This Expert Committee should examine in depth the justificaion for the computers, data processing machines etc., in use in each of the Government Departments, organisations etc. and suggest concrete measures to bring about efficient working, rationalisation and economy. The Committee would like to be informed without delay of the concrete action taken in pursuance of this recommendation and also the results achieved.

[Sl. No. 34 (Para 4.35) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action Taken

An Expert Committee has now been constituted with composition and terms of reference as given below:—

- (i) Brig. V. M. Sundaram—Army Hq., EDP Centre
- (ii) Representative, Cost Accounts Branch (Ministry of Finance)
- (iii) Dr. Virender Gupta. Indian Institute of Public Administration
- (iv) Representative Information Planning and Analysis Group (Member Secretary)
- (v) Shri V. R. Rao, Director, Central Statistical Organisation, Ministry of Planning Commission
- (vi) Shri N. N. K. Nair, Joint Secretary, Department of Expenditure, Ministry of Finance.

Terms of Reference

- (a) To collect detailed information concerning the installation and utilisation of Electronic Data Processing equipment acquired by various Government Ministries/Departments.
- (b) To examine in depth the justification of computers, data processing machines etc. in use in each of the Government Departments/Organisations etc. and suggest concrete measures to bring about efficient workings, rationalisation and economy.
- (c) To study the utilisation of Electronic Data Processing machines etc., hired or purchased by various Government Departments/Organisations and to assess the benefits obtained out of these machines vis-a-vis the heavy expenditure (manpower, equipment etc.) incurred thereon.
- (d) To report on the extent to which various Government Departments and Organisations have been able to put Electronic Data Processing facilities to worthwhile and adequate use.
- (e) To suggest improvement in Electronics Data Processing beset information gathering, processing, disseminating in thodologies in Government so as to improve decision making, effect overall economies and increase efficiencies.

- (f) To evolve guidelines and check lists in order to ensure that at least in future the request for acquisition of computers, data processing machines etc. would be examined critically in the light of the guidelines before decision are taken.
- (g) To lay-down level below which, if the load of work goes down; the computer is to be given up and the work got done through the services of Computer Centre.

It is submitted that the terms of reference have been finalised on the basis of the various aspects highlighted by the Public Accounts Committee for a more detailed scrutiny. Since very many aspects of computerisation in Government departments were being investigated in considerable depth and a large amount of evidence was being collected, by the Public Accounts Committee, Government considered it more advisable to await the conclusions of the investigation and the findings by the Public Accounts Committee so that any indepth study by the expert committee may be more purposeful in terms of the findings of the Public Accounts Committee.

[Department of Electronics No. 275(1)/76-DE, 4.35 dated 25-8-1976]

Recommendation

The Expert Committee will be expected to evolve guidelines and check lists in order to ensure that at least in future the requests for acquisition of computers, data processing machines etc. would be examined critically in the light of the guidelines before decisions are taken.

[Sl. No. 35 (Para 4.36) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action Taken

This aspect has been included in the Terms of Reference for the Committee on utilisation of Computer in Government.

[Deptt. of Electronics No. 275(1)/76-DE-4.36, dated 25-8-1976]

Recommendation

The Committee emphasise that the Departments/organisations desiring to acquire computers, data processing equipment etc., should make a thorough preparation of their case by identifying in detail the projected tasks and assignments, as well as organising the data to be fed to the computer and training of staff etc., so that the computers, data processing equipments, etc., could become effective immediately after acquisition. It is also necessary to have a perspective plan to ensure the optimum utilisation of computers, data processing 2109 LS—6.

machines, etc., on a long term basis.

[Sl. No. 36 (Para 4.37) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action Taken

All requirements for installation of computers in Government departments are projected to the Department of Electornics for their clearance on the basis of detailed justification including requirements of staff for operations, maintenance and application development. The Department of Electronics also endeavours to have primary Systems Groups established or identified in the various user organisations for drawing up such long term plans and for effective follow-up of computerisation programmes. Aspects of training of the staff and also provision of other infra-structure to support computer installations are also set down and recommendations made. The Department of Electronics is also constantly in touch with other major departments to identify long term needs of such departments. Such identification of needs apart from ensuring a planned development and optimum utilisation of data processing machines is also very necessary for the purpose of planning and licensing of indigenous production programmes in the country as well as for any possible import.

[Department of Electronics No. 275 (1) /76-DE, dated 25-8-1976]

Recommendation

The Committee stress that there should be a built-in arrangement in the department, organisation etc., for periodical evaluation of the actual use made of the computers, data-processing machines etc., with reference to the hypotheses and parametres on the basis of which they had been acquired. This review should be carried out at least once a year, so that timely remedial measures wherever required, could be facilitated. There should be no hesitation in giving up the use of a computer, data processing machine etc. where the logic of experience warrants it or where the work could be done more economically by availing of the facilities in a Computer Centre or in another Government department|organisation. It should have also been possible to qualify the gains in financial terms as far as possible and to compare them with the parameters which had been assumed at the time of acquisition of computers, data processing equipments etc. That their continued use could and should be determined with reference to the cost benefit factor is a point which should not be lost sight of.

[Sl. No. 37 (Para 438) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action Taken

The Department of Electronics is now laying down certain guidelines for various sectors and all the Government departments, to obtain information regarding the applications and the utilisation of currently installed computer systems. The Expert Committee currently set up would carry out a first analysis, with regard to installations in Government and a procedure for subsequent reviews on an annual basis will be implemented.

[Department of Electronics No. 275(1)/76-DE, dated 25-8-1976]

Recommendation

The Committee are glad that the Department of Electronics are encouraging the setting up of Computer Centres in metropolitan as well as Regional sites. As these would be medium/large-size computers with a wide range of capabilities, it is necessary that there should be meaningful coordination between the computer centres and the users, particularly those belonging to Government and the public sector, so that the information and input and output systems in the computer centres are made to sub-serve the best and widest public interest. The Committee reiterate that they look to the computer not just as a labour-saving device but as an instrument, indispensable in the modern context of upgrading organisational capability to take well-informed and vitally productive decisions after taking into consideration the present-day multiplicity of relevant factors. For example, there could be highly significant computer study and analysis of our exports and imports with reference, particularly, to the efficacy of incentives given to increase exports of manufactured products and to export goods to new markets. and also the inter-related subject of dis-incentives for imports, so that the country could accelerate the achievement of a self-reliant economy. There could also, similarly be studies to evaluate the impact of various economic and fiscal measures on the development of the economy in various sectors so that Government could have useful and timely information on which to base appropriate action. The Committee note that the Department of Electronics have already taken some initiative in the matter of developing an information system in various fields, such as coal, steel, manpower planning etc.

[Sl. No. 38 (Para 4.39) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action taken

The Regional Computer Centre at Calcutta has been registered as a non-profit making Scientific Society with the Government of India. Department of Electronics. University Grants Commission, and the Government of West Bengal as the Trustees. This Centre will serve the needs of various users in the Calcutta Region primarily applications in Regional Planning. State Level Planning. Management of Industries, Coal India Information System, Production Oriented Applications Research & Development including meeting the needs of local Universities and training of high-level manpower. In preparation for the setting up of the National Informatics Centre at Delhi, (for developing methodologies for buildingup of large data bases and development of applications in planning, a number of sub-systems are currently under development. These cover areas such as Industrial production, exports/imports, patents. Customs & Excise Information System agricultural information manpower planning etc. The project document setting down the objectives and programme of the centre have been approved by the UNDP who will be providing the equipment and training support for the programme. The National Centre for Software Development and Computing Techniques at Bombay has been set up with UNDP support and the Centre has been developing software and techniques in areas as computer networks, computer-aided design etc. to Support industry and Semi-Conductor Industry the computer facilities have also been set up for software development for export. at Delhi. Baroda. Bombay and Hyderabad. These and other major centres are being envisaged as multiple use facilities enhancing the capability and potentiality of the user community in India for sophisticated applications. The suggestions examples) put forward by Public Accounts Committee are noted for guidance

[Department of Electronics No. 275 (1) /76-DE, dated 15-10-76]

Recommendation

The Committee would very much like a closer coordination between the Department of Electronics and the user Departments. This should help to identify in depth the relevant requirements particularly those which have a bearing on planning and development and concern more than one department. It may be worthwhile to classify these requirements broadly under three heads:—Economic administration, social administration and general administration There could be compact groups consisting of the representatives of

the Department of Electronics and the Departments concerned, so that they could identify the areas requiring computerisation after mutual exchange of ideas and programmes. Similarly, the requirements of computers for the public sector could perhaps also be identified on a sectoral basis with the help of the Bureau of Public Enterprises.

The Committee consider it important to stress that it is only when there is meaningful co-ordination between the user departments and the Department of Electronics/Manufacturing Units that a computer system programme can be properly designed to serve the public interest in the best way possible, and to avoid the waste, which so often occurs, of the country's talent and treasure.

[Sl. No. 39 (Para 4.40) of Appendix XIV to 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

The Department of Electronics maintains a close liaison with all the user departments in the Central Government as well as with the State Governments for developing applications which have a bearing on Planning and Development. The Department has been having discussions with the systems groups responsible for planning and implementation of computer based information and decision making systems in Ministries and Departments such as Defence, Home (Police and Hindi Directorate), Railways, Steel, Agriculture, Space, Petroleum & Chemicals, Communications, Finance (Board of Direct Taxes), Atomic Energy, Oil & Natural Gas Commission, Banking Union Public Service Commission, Planning Commission and Public Sector Corporations such as Bharat Heavy Electrical Ltd.. Bharat Electronics Ltd., Electronics Corporation of India Ltd., Oil India etc. Both short-term and long-term requirements are jointly analysed and drawn up through such discussions. The Department of Electronics has been promoting the setting up of appropriate systems groups in the user areas with which it can interact thereafter on a continuing basis. The Department of Electronics is also represented on the Committee of Experts set up to go into the role of computers for the public sector. The Department also constantly meets with manufacturing units in the public sector and the water sectors as well as with small-scale units and other entrepleneurs who are involved in hardware and software activities to provide them any possible guidance with regard to new approaches and assistance to overcome any difficulties. Constant dialogue is maintained with users, consultants and manufacturing organisation

through the aegis of the Technology Development Council Working Group on computers to ensure that appropriate promotional action is taken for the development of hardware and software specific to our national needs. In addition constant interaction is maintained with professional organisations like the Computer Society of India, Institute of Electronics & Electrical Engineering, Institution of Electronics and Telecommunications Engineers and others. [These and other aspects are given in detail in the Annual Report of the Department of Electronics (1975-76)].

[Deptt. of Electronics No. 275(1)/76-DE(4.40), dated 15-10-76]

Recommendation

The Committee attach great importance to the data-security aspect involved in computerisation. So long as the leakage of information was possible only through men data security did not pose so very much of a problem. But with sophisticated instruments which can be remotely controlled or with components which can store information several times more than the normal human brain can, the dangers to data-security have become far-reaching and almost frightful. Today, it seems, in most of the Government Departments we generally have what is known as 'batch processing systems. But in the not very remote future we would be having information systems inter-connected with each other or systems with multiple access. These new facets of technological change are bound to pose peculiary complex problems of security. The Committee would urge that immediate attention should be given to this problem and Government should make sure of an adequate awareness in all sensitive Departments about the paramount importance of data-security, and also the provision of the essential wherewithal to counter all threats to it.

[Sl. No. 40 (Para 5.35) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action taken

The Government is aware of the problems involved in data security arising out of computerisation. A security drive is being launched to bring about an awareness of such problems. The Government has also set up a Standing Committee on Security with the following Composition and terms of reference:

COMPOSITION OF THE COMMITTEE

Chairman Col. A. Balasubramanian, Deptt. of Elect.

Member Dr. N. Seshagiri, Electronics Commission.

Member Shri M. K. Barooah, Intelligence Bureau, Ministry of Home Affairs.

Member Representative from the Ministry of Defence.

Member Representative from the Ministry of Communication.

Member Shri V.K. Kohli, Rep. from Planning Commission (Deptt. of Statistics)

Member Dr. K. S. Prabhu, Rep. from Space Commission.

Member Dr. N. Vijayaditya, National Informatic Centre.

Member Dr. S. Ramani, Rep. from National Centre for Software Development and Computing Techniques.

Member Shri K. Santhnam Director Cabinet Secretariat.

Member Dr. A. Lahiri, Rep. from Deptt. of Science & Technology.

Member Dr. Patward han from Deptt. of Atomic Energy.

THE TERMS OF REFENCE

- (i) to collect information regarding the existing procedures and system of ensuring data security in Departments/Organisations using Computers, Electronic Lata Processing equipment etc;
- (ii) examine the adequacy of the smeasures existing in the Departments/Organisations etc. for ensuring security of information etc;
- (iii) suggest improvements in the technological and administrative fields for ensuring security of data/information generated in the use of Computer, Data Processing equipment, etc;
- (iv) consider whether technological devices should not be installed straightway on the imported computer systems working in sensitive Government Departments so that no risks are taken with data security;
- (v) initiating research studies to increase knowledge and understanding of security of data more especially with computers which have either been taken on hire from multinationals or which have been imported; and
- (vi) make a study of the subject of preserving confidentiality of information particularly concerning individuals so that it is not misused by unauthorised persons.

[Department of Electronics No. 275(1)/76-DE-5.35, dated 25th August, 1976]

Recommendation

The Committee note that there are enough monitoring safeguards to check against unauthorised transmission through the gadgets surrepetitiously installed in our computers. But as pointed out in paragraph 5.1 the possibilities of a such leakage cannot be completely ruled out. Several other subtle methods by which access to the information can be had have been enumerated in the aforesaid paragraph. The Secretary, Department of Space himself told the Committee that "the overall possibility of the espoinage or intelligence gathering without the knowledge of other people is really, fantastic in electronics; there is a large electronic-magnetic specturm from which you can gather this information."

[Sl. No. 41 (Para 5.36) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action taken

These aspects are being referred to the Inter-Ministerial Committee on Security.

[Department of Electronics No. 275 (1) /76-DE, dated 25th August, 1976]

Recommendation

The Ministry of Defence, and the Ministry of Space who have also installed computers, informed the Committee that they had taken special steps to screen the persons employed on operating computers. The Committee are not sure whether similar screening is being done by other Departments handling information of a sensitive nature. The Committee feel that such screening is necessary only in the Departments of Defence and Space but in other Departments plso. Government should take adequate care issue necessary instructions in this regard. The Committee were informed by many Departments that they had their own personnel for maintenance. But in those cases where the computers had been hired and the maintenance was being done, for example, by IBM, the representative of the Department of Electronics acknowledged the danger of a foreign manufacturers' employee becoming friendly with their personnel of the computer with a special motive and worming his way to the information.

[Sl. No. 42 (Para 5.37) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action taken

These aspects are being referred to the Inter-Ministerial Committee on Security.

[Department of Electronics No. 275 (1) /76-DE, dated 25th August, 1976]

Recommendation

About IBM, the Secretary, Department of Space, made a pregnant observation: "In the last 5 years or so we have been fairly aware of the difficult position in which the IBM has been able to place the various parts of the world". Alluding to IBM, the representative of the Department of Communications, had similarly to say: "regarding any international organisation of this type which is foreign without mentioning anything specific it can be said that we would not be surprised if we come to know that some foreign multinational corporations which are operating in our country adopt certain methods which are not in our national interest". In the light of these observations and in view of the fact that the country continues to largely depend on foreign companies in the computer field the Committee anxious concern about the security aspect will be appreciated.

[Sl. No. 43 (Para 5.38) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action taken

These aspects are being referred to the Inter-Ministerial Committee on Security.

[Department of Electronics No. 275 (1) /76-DE. dated 25th August, 1976]

Recommendation

The Committee note that the Department of Electronics are exercised about the problem of ensuring security of information and are considering actively the setting up of a panel of specialists to advise the Electronics Commission of this issue. The Committee wish this panel of experts to be constituted without delay. The panel of experts may co-opt representatives of the Ministries of Home Affairs, Defence, etc., so that all relevant aspects can be taken into account while devising foolproof measures to guard against data falling into unauthorised hands. The Committee would also like to refer in this context to the statement made by the Department of Electronics that it was technologically possible to instal hardware

and software keys with the help of local computer engineers on imported systems in order to obviate chances of leakage of data to unauthorised persons. The Committee would like Government to consider whether these technological devices should not be installed straightway on the imported computer systems working in the sensitive Government Departments so that no risks are taken with data-security.

[Sl. No. 45 (Para 5.40) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action taken

These aspects are being referred to the Inter-Ministerial Committee on Security.

[Department of Electronics No. 275(1)/76-DE, dated 25th August, 1976]

Recommendation

The Committee would urge that the Department of Electronics should take a lead in encouraging research studies to increase knowledge and understanding of the security of Computer System, more specially the computers which have either been taken on hire from multinationals or which have been imported. The Department of Electronics should have a cell which would provide computer users and indigenous computer manufacturers with information and guidance about security measures.

[Sl. No. 46 (Para 5.41) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action taken

The Department of Electronics has set up a Standing Committee on security with representatives from major user departments such as Ministry of Home Affairs, Planning Commission, Space. Atomic Energy, Defence, Electronics and others. This Committee would be making recommendations with regard to various security measures that have to be taken. This, apart from the Working Group on Computers of the TDC of Electronics Commission, has also been concerned with the aspect of computer security and encouraging research studies to be undertaken by various institutions in the country. A Security Cell is now being set up with the Computer Directorate of the Department of Electronics.

[Department of Electronics No. 275 (1) /76-DE, dated 25th August, 1976]

Recommendation

The Committee understand that the subject of preserving confidentiality of information, particularly concerning individuals, so that it is not mis-used by unauthorised persons, has been attracting the attention of a number of countries like Germany, France, United Kingdom etc. In U.K. two White Papers on "Computers and Privacy" and "Computers; Safeguards for Privacy" have been brought out during the last two years. The Committee suggest that the developments in U.K. and elsewhere may be studied by the Department of Electronics and perhaps also utilised in whatever ways might be thought appropriate.

[Sl. No. 47 (Para 5.42) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action taken

These aspects are being referred to the Inter-Ministerial Committee on Security.

[Department of Electronics No. 275(1)/76-DE dated 25th August 1976]

Recommendation

The Committee find from an analysis of the operating revenues of IBM and ICL that machine rentals have been the principal sources of their revenues in India. In the case of IBM, the percentage of machine rentals to the total operating revenues ranged from 53.39 in 1974 (Rs. 12.57 crores) to 61.10 in 1969 (Rs. 6.12 crores). So far as, ICL is concerned, the percentage of machine rentals to their total income in 1975 was 62.25 (Rs. 4.91 crores), and that for 1974 stood at 59.12 (Rs. 4.07 crores). Further major item in the revenues of these companies is the charges on account of data processing. About 9 per cent of the total income of IBM in 1974 was derived from this source.

[Sl. No. 48 (Para 6.146) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action taken

It is true that revenues from rentals of computers and data processing equipment from the major share of the total operating revenues of the two foreign companies viz., IBM and ICL. The levy of charges on account of data processing also contributed substantially to the operating revenue of these two multi-national companies. The Electronics Commission had decided even in 1971 that further procurement through import of all computer systems will be by outright

purchase rather than by hire. Further, the Department of Electronics is now carrying out a detailed analysis of hiring and purchase options for different environments and under varying conditions; and guidelines in a generalised basis will be issued for guidance of the users.

[Department of Electronics No. 275 (1) /76-DE dated 25th August 1976]

Recommendation

The Committee have elsewhere in this report commented on the thoughtless manner in which the machines were taken at exhorbitant rent by Government departments and other users. It is strange that Government took no steps to ensure that machines which had been largely brought in on what is called 'As Is' basis and being of negligible value had to be somewhat refurbished could at least be acquired by the users at reasonably lowered prices or were hired on commensurate rentals. The Committee feel that if this elementary care had been taken and the rentals fixed on a rational basis after taking into account the import price, the estimated cost of refurbishing, the life of the machine (with particular reference to the depreciation claimed from Income-Tax authorities) and also the fact of reasonable charges having to be made for spare and maintenance, Government Departments would have been able to save large amounts of money.

[Sl. No. 49 (Para 6.147) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha).]

Action taken

In this connection it is stated that 'As Is' programme have been phased out. Prices/rentals charged by these multi-nationals companies have been referred to the Inter-Ministerial Committee for examination of the reasonableness of the same. Based on the findings, necessary action would be taken by the Government for conversion of hire into purchase. A proposal has also been received from IBM for outright sale of machines at present on hire on a certain basis. Negotiations in respect of this proposal are currently progress.

[Department of Electronics No. 275 (1)/76-DE dated 25th August 1976].

Recommendation

As noted earlier, one of the chief items of business which provides substantial revenue and profit to the multi-nationals comprises the provision at a price of data processing facilities. It seems now entirely within the technological competence of the Department

of Electronics to set up the common computer and data processing facilities to meet the country's requirement. The Committee have elsewhere in the report stressed the need for a time-bound programme to set up these centres in metropolitan and other key regional cities. Such facilities should be such as not only to meet the users present requirements but also anticipate the steadily growing sophistication in information systems. The Committee wish that the Department of Electronics set up these facilities without delay and in a satisfactory manner, thus, obviating any further reason for the foreign companies to function in this area.

[Sl. No. 50 (Para 6.148) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action taken

The Service Bureaus operated by IBM and ICL are now being phased-out to be taken over by other computer centres set up by Government, or in the public sector, or by some of the Indian nationals returning from abroad who have brought in computer systems out of their foreign exchange savings abroad, and also by some of the existing computer installations in the country which have spare capacity. The Government is also going ahead with the plan of setting up of Regional Computer Centres, or supporting large computers at locations such as, Delhi, Calcutta, Bombay, Poona, Kanpur and Bangalore, Hyderabad and Madras. The programme will be extended to other centres such as state capitals and centres of industrial activity subsequently.

[Department of Electronics No. 275(1)/76-DE dated 25th August 1976].

Recommendation

The Committee note from a recent study that the total outflow of foreign exchange as a result of IBM operations in India works out to about Rs. 10.83 crores during the period 1969 to 1974. At a lesser level, the total outflow of foreign exchange on account of ICL's operations in India comes to about Rs. 9.58 lakhs during the period 1972-73 to 1974-75.

[Sl. No. 51 (Para No. 6.149) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action taken

Government note the observations of the Public Accounts Committee on the remittances liability that arose out of the operations of IBM and ICL in India. A decision has been taken to ensure over

the future reduced foreign exchange liability and to see that the foreign companies in India conform to national policy both with regard to foreign equity and that laid down for the field of electronics. The applications made by the two companies under section 29(2)(a) of the Foreign Exchange Regulations Act, 1973 are under consideration. It is hoped that on the basis of the decisions of the FERA Committee the companies as re-structured will operate in a way that foreign exchange remittance will be on a reduced level and would be commensurate with the efforts of these companies to conform to the National policies.

[Department of Electronics No. 275(1)/76-DE, (Para No. 6.149) dated 22-1-77]

Recommendation

The Committee see no reason why Government fell for such a peculiar package arrangement as has just been referred to. In all prudence the details and value of machinery and parts required for turning out export products should have been scrutinised at some depth. It was all the more necessary to ensure that the machinery and parts imported for the internal market truly conformed to the Government's thinking and policy on computers and that the equipment so imported was best suited to the technological requirements of the country. In any case, Government should have taken pains to see that there was a co-relation between the cost at which the goods were imported and at which they were made available to the end users including Government Departments, in order to prevent all scope for defrauding the public and the exchequer by dextrous manipulations. The Committee would like to recall in this context the views put forward by the Secretary, Electronics Commission, during the course of evidence before the Committee:

"We are clearly of the view if there is to be any meaningful role of the operations of IBM in regard to 100 per cent export programme, it has to be as in the case of other export promotions where no such preferential account is built up. Foreign exchange earnings come in the country and become part of the reserves and import operations are undertaken based on the kind of product to be imported, their prices and implications for the local programmes."

[Si. No. 53 (Para 6.151) of Appendix XIV to the 221st Report of the PAC (Fifth Lok Sabha)]

Action taken

Under the revised procedures for procurement of computers which is being followed currently there is considerable increase in equipment options through systems offered by a wide range of manufacturers. A close scrutiny of the costs and related performance of computers systems offered by the various manufacturers is now made as part of the regular procedure. With regard to export programmes, the capital goods and raw materials requirements are evaluated carefully before being cleared for import; and all export earnings accrue to the country.

[Department of Electronics No. 275 (1) / 76-DE dated 15th October, 1976].

Recommendation

The Committee would like Government to ensure that in any transaction with multinationals and foreign companies in computers etc. care should be taken to prevent a net outflow of foreign exchange; that the import requirements for export manufacture are treated distinctly from those for the internal requirement of the country; and that a strict watch is kept on the quality, quantity and price of goods and their relationship to the requirements of the internal market and the price charged from the end user.

[Sl. No. 54, (Para 6.152) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action taken

This recommendation of the Public Accounts Committee has been noted for compliance. The points made by the P.A.C. are being applied in regard to their restructuring and operations of the foreign computer companies in the country. Foreign Exchange Regulation Act Committee will also bear in mind these criteria while considering the applications of the companies.

[Department of Electronics No. 275 (1) /75-DE (Para 6.152) dated 22nd January, 1977.]

Recommendation

The Committee note that the ICL follow different conversion factors in the matter of transfer of machines and equipment from the parent foreign company to the Indian branch; the rate ranging for some extraordinary reason, from £1=Rs. 8.3 to £1=Rs. 19.25. This must be a clever mechanism which must be fully probed by Govern-

ment and action taken accordingly, so that all deteriment to the country's interests can be avoided.

[Si. No. 55 (Para 6.153) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha).]

Action taken

It is stated in the above recommendation that the ICL followed different conversion factors in the matter of transfer of machines and equipments from the parent foreign company to the Indian Branch. ICL (UK) has two operations in India: ICL (India) a 100% (of ICL-UK) foreign equity company registered in India; and the International Computers India Manufacturing (ICIM) Ltd. in which ICL (UK) holds 60 per cent equity. In this connection, it should be pointed out that there is generally no transfer of machines and equipments from ICL (UK)—the parent company—to ICL India, the branch company, directly. However, the correct factual position would be that "the ICL followed different conversion factors in the matter of transfer of machines and equipments from the manufacturing company (ICM) to the marketing company (ICL—India).

- 2. The question of the application for different conversion factors to arrive at transfer prices in rupees has been discussed in meetings attended by representatives of the Department of Electronics, Department of Economic Affairs, Chief Cost Accounts Officer, Ministry of Finance and ICL. It was explained by the representatives of ICL that whilst prices of machines and equipments for transfer from the manufacturing company to marketing company had been fixed in rupees by mutual negotiation, however, in respect of attachments to machines and equipments, they did not have rupee prices. Since sterling prices are available with ICL (U.K.) for the machines, equipments and attachments, they have used index factors for arriving at prices for these attachments. For this purpose, sterling prices for the imported machines, equipments had been used as a starting point and index factors relating the sterling prices in the UK to the desired rupee prices for transfer in India are arrived at for each machine/equipment. It was further explained that the range of index factors are in three different groups as under: -
 - (a) For 1900 computers which are manufactured as new equipment, the rate is the highest viz. 19.25 (equipment costing £ 1 sterling in UK would be transferred for Rs. 19.25).
 - (b) For machines which are rebuilt, and thus require less effort than new manufacture, the index factors are less and they range from 9.41 to 12.34.

- (c) For rebuilt machines requiring even less effort than in (b) above the index factors are still lower viz. 8.13.
- 3. The matter was further examined in the light of the clarification furnished by ICL. It is found that the conversion factors were in fact meant to be factors applied in respect of minor component items such a "attachments" to arrive at prices in rupees for the internal transfer between ICIM and ICL (India) and were never used for external transactions. These conversion factors do not have much significance in the matter of ultimate prices of the company, as sale prices of the machines and equipment to end users conform to international list prices.
- 4. It would however, appear that ICL have also used such conversion factors for the purpose of declaring the value for excise levy. Excise Duty, is assessable with reference to the Indian cost of production. It is understood that the excise authorities are already seized of this matter. The ICL representative also clarified that the ICIM became exciseable for the first time from 1st March, 1970 whereas index factors were fixed in 1964.
- 5. ICL have confirmed that they have determined rupee prices for attachments as well now, and have discontinued since December 1976 the practice of using index factors for determination on prices.

[Department of Electronics No. 275(1)/77-DE dated 25th March, 1977].

Recommendation

The only tenable excuse for the import of 'AS IS' machines could be their suitability, at competitive cost, to the users at a particular stage of development. The facts as pointed out in Chapter III and earlier in the Committee's 127th Report on the use of computers for the Railways, indicate clearly that the hire charges were exorbitant and bore hardly any relationship to the nominal cost at which these 'AS IS' machines were imported as "hulks" and refurbished after arrival. The only valid criterion for permitting such imports would be whether these had been made available at economic or reduced rates to the end users. The answer to this query can be only in the negative. The Committee regret to find that Government never exerted itself through its various specialised and also knowledgeable agencies like the Departments of Electronics, Railways. Economic Affairs and Industries to examine the issue in an integrated manner and even to ensure that an organisation like IBM did not use the nascent market of India as a dumping ground for its outmoded machines by dint of high-pressure salesmanship. The Committee would like Government to at least learn a lesson from this harsh experienced. Such package deals as have made it possible for IBM to dump in India what was largely junk, that is, machinery and gadgets which had hardly any market elsewhere in the world and yet to earn excessively high profits without making any substantial or significant contribution towards India's attainment of self-reliance in critical areas of computers must no longer be tolerated in this country.

[Sl. No. 56 (Para 6.154) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)].

Action taken

The programme of 'AS IS' manufacture has been phased-out and a close scrutiny is being maintained with regard to ensuring that price advantages in case of inescapable procurement of any obsolete or used machines are passed to the end-user.

[Department of Electronics No. 275(1)/76-DE dated 25th August 1976].

Recommendation

The Committee understand that the position has not yet crystallised as the matter is still under discussion between IBM and the
various Government Departments concerned. The committee, are
however, positive that the provisions of the Foreign Exchange Regulation Act and the guidelines and directives issued thereunder should
be strictly enforced and the spirit underlying the basic national legislation must not be foiled. With the growth of our computer industry
and the measures now happily being taken to develop mini and midi
computer and the setting up of Companies Maintenance Corporation,
it should be possible for us to be self-reliant except for too highly
sophisticated areas requiring large size computers. There can, thus
be no reason to truckle down to the truculent postures of such formidable foreign firms like IBM. These observations apply mutatis
mutandis to ICL and its associate ICIM.

[Si. No. 58 (Para 6.156) of Appendix XIV to 221st Report of of PAC (Fifth Lok Sabha)].

Action taken

Government can assure the Committee that the basic criterial governing National Electronics policy as also the FERA guidelines would be applied with firmness and that the directives issued would be enforced.

[Department of Electronics No. 275(1)75-DE (Para 6.156) Dated 22-1-77]

Recommendation

The Committee feel happy and fortified in their view, as they note the statement made before them by the spokesman of the Electronics Department that 'in case IBM decide that they would not really fall in line with the policies of the Government of India and if they decide to leave the country, we should not be in any difficulty at all'. He had added that 'the Technological options that we see for this country—the manner in which computer industry should develop in this country are decidedly not in line with the technology policies of IBM'.

[Sl. No. 59 (Para 6.157) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)].

Action taken

The proposals submitted by IBM are being considered in the light of the guidelines of FERA and IBM would be advised to restructure there operations in line with the policy of Govt.

[Department of Electronics No. 276(1) /76-DE dated 25-8-76]

Recommendation

It is seen that the exports made by IBM consist mostly of unit record machines and punch card systems, both of which are fast becoming obsolescent in the context of rapidly developing technology. India has an abundance of skilled manpower, and if IBM really meant to assist in the technological or industrial growth of this country, they could have had a more meaningful programme for manufacture. They have made no effort, either to sub-contract their export requirements to indigenous units help them with technology and know-how and to secure a meaningful participation in export effort. Assistance from such quarters as IBM cannot, however, be expected for such taskes as the development of a research and development programme which would truly facilitate the attainment of self-reliance and the upgrading of our technology to an internationally competitive status.

[Sl. No. 60 (Para 6.158) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)].

Action taken

The programmes of IBM in India are now being modified under Foreign Exchange Regulations Act to ensure that their activities bring in high Technology and are export-oriented. A close watch is also kept to ensure that they would sub-contract many of their components etc. to other industries in the country.

[Department of Electronics No. 275 (1)-76—DE dt. 25-8-76].

Recommendation

The Committee regret to note that it has not been possible for the Central Board of Excise and Customs to furnish to them details of the total customs duty realised on all imports by IBM and the total drawback paid to them during each of the last 6 years on the ground that the statistics in the Customs House are not maintained importer or exporter-wise but on the basis of commodity description. The Committee do not consider this to be a satisfactory explanation because there are not many importers of data processing equipment. Even with commodity wise figures it should have been possible for the customs authorities to furnish with some efforts information about the drawbacks paid to the IBM because according to the Customs authorities themselves. IBM exported only 2 types of machines, namely, 029 and 129.

[Sl. No. 68 (Para 6.166) of Appendix XIV to 221st Report of the PAC (Fifth Lok Sabha)].

Action taken

The Collector of Customs, Bombay, has reported that during the years 1970-71 to 1975-76, an amount of Rs. 77.70.811.35 has been paid as drawback to M/s. IBM on exports other than 129 type machines. Year-wise breack-up of payment of drawback is as follows:—

	• •	,	•			TOTAL			177,70,811-35
(6) 1975-76						•	•		3,46,283 · 00
(5) 1974-75			•						2,24,816· on
(4) 1973-74			•		•	•			24,66,182.90
(3) 1972-73				•	٠	•	•	•	24,01,780° 00
(2) 1971-72	•		•		•		•	•	22,20,847 · 20
(1) 1970-71		•		•	•	•	•	•	1,10,902:25

As regards 129 type machines, it is submitted that no drawback has been paid to M/s. IBM on these type of machines, as explained in this Department's Action taken note in respect to Recommendation No. 6.197 of this report.

(Department of Revenue & Banking F. No. 512-8-76/Cus. VI).

Recommendation

An interesting fact of this problem which came to the notice of the Committee was that IBM was allowed to import certain items on payment of import duty and certain others under bond. Only recently IBM had been given option either to use wholly duty-paid components or bonded components in their manufacturing process. Since the items imported on payment of duty as well as those imported on bond are likely to be used in the same machine, the Committee feel that the Customs authorities should segregate them and ensure that the duty is correctly levied and paid and drawback is also correctly given.

[Sl. No. 70 (Para 6.168) of Appendix XIV to 221st Report of the PAC (Fifth Lok Sabha)].

Action taken

As stated in reply to point No. 51 of the list of points arising out of evidence tendered before the P.A.C. in November, 1975, bonded components were issued for use in machines meant exclusively for export. Segregation had also been effected by erecting a partition in the factory. Supplementary rules have also been framed and accounts maintained to ensure that non duty paid components did not go into domestic consumption. Since 30-4-76 the Company is using all duty paid material in the manufacture of their machines. Moreover, bonded warehouse has already been segregated from the duty paid stock and their is no possibility of mixing up of these pants. Clearance of bonded goods on ex-bond bills of entry for home consumption is allowed only after payment of Customs duty leviable thereon.

(Department of Revenue & Banking F. No. 512'8'76'Cus-VI).

Recommendation

Like the repatriation of profits and the head office expenses the Committee find that Rs. 4.98 lakhs were allowed to be repatriated on account also of development rebate reserve. The reason given by the Income-tax Department is that they do not "allow the assessee to use the provision for development rebate for a period of 8 years. They have to get it either for capital expenditure or some other approved expenditure. After that they are allowed to take it as a

part of profit and they can declare dividend out of it". The Committee are inclined, however, to agree with Audit that the philosophy behind development rebate was to give incentive to develop industries in India. That could be done by utilising the reserve for the intended approved objective. But the reserve had to be kept in tact and not frittered away by way of dividends or repatriation abroad after 8 years. The Committee urge that the matter should be re-examined so as to preserve funds created out of the development rebate for development with in the country.

ISI, No. 81 (Para 6.179) of Appendix XIV to 221st Report of the PAC (Fifth Lok Sabha)]

Action taken

The recommendation of the Committee is acceptable to the Department. However, it is pointed out that under Notificaion of the Government of India in the Ministry of Finance (Department of Revenue & Insurance) No. S.O. 2167 dated 23rd May, 1971, issued under sub-section (5) of Section 33, development rebate will not be allowed in respect of ships acquired or machinery or plant installed after 31-5-1974 except in a few special cases. Therefore, the amendment of Law, in so far as development rebate is concerned, in the light of the Committee's recommendations is not necessary. However, in the matter of "investment allowance" introduced with effect from 1-4-1976 under section 32A inserted in Finance Act, 1975, the Committee's recommendation has been duly taken into consideration to ensure that the "investment allowance" made is actually utilised for the purpose of acquiring the assets within a period of ten years for the purpose of the business.

[Department of Revenue & Binking F. No. 341/42, 76-A&PAC-1]

Recommendation

The Committee are surprised that in spite of the fact that IBM is a giant world company, the return of income for several successive years from 1964-65 to 1973-74 were assessed by an officer only of the rank of Income-tax Officer. The Committee in their 186th Report on Corporation Tax and Income Tax—A Review have reiterated that initial assessment of large companies should be made centrally by experienced senior officers of the department not lower in rank than an Assistant Commissioner so that all aspects having bearing on taxes are gone into. The Committee would like the Ministry to investigate how the assessment of IBM for all these years were being done by experienced senior officers of the department not lower in rank than only an Income-tax Officer and not by a senior officer as per the

principle stressed several times by the Committee and accepted by Government. Government should inform the Committee of the action taken and fix responsibility in the matter. Government should also review this matter in respect of other powerful companies, particularly the multi-nationals, to make sure that their income is meticulously assessed initially by senior officers not lower in rank than an Assistant Commissioner.

(Sl. No. 82 (Para 6.180) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)].

Action taken

The case of this company has now been assigned to an Inspecting Assistant Commissioner of Income-tax at Bombay. Instructions F. No. 493 1.75-FTD dated 7-8-1975 (Annexure) have already been issued to Commissioners of Income-tax to assign cases of foreign companies with last assessed income excluding Rs. 5 lakhs to Inspecting Assistant Commissioners. Moreover, seven LA-Cs, in various charges have already been assigned assessment work in respect of important cases in those charges. In view of the present shortages in the cadre Assistant Commissioners, it has not been possible to post more Inspecting Assistant Commissioners for this purpoe and we may have to wait till extra manpower becomes available. The matter is being further examined and the additional manpower requirements are being worked out in order to implement the Committee's recommendation fully

1 Department of Revenue & Banking F. No. 241/41/76-A&PAC-1].

ANNEXURE

GOVERNMENT OF INDIA

CENTRAL BOARD OF DIRECT TAXES

F. No. 493 | 1 | 75-FTD.

NEW DELHI, the 7th August, 1975

To

All Commissioners of Income-tax.

Sir.

Sub: Assessment of foreign companies and their senior executives and directors—

For some time past, the Board had under consideration a proposal to assign cases of foreign companies and their senior executives and directors to selected LA.Cs. The proposal has been carefully considered and the following decisions have been taken by the Board:—

- (i) A beginning may be made by assigning cases of foreign companies with last assessed income exceeding Rs. 5 lakhs and their senior executives and directors to IACs, while the cases of foreign companies having incomes below Rs. 5 lakhs may continue to be dealt with by ITOs.
- (ii) In West Bengal as well as Bombay, the cases of these companies and their senior executives and directors may be assigned to one IAC each on whole-time basis. If the workload is considered to be too much for one IAC, the Commissioner may distribute the cases between two IACs. In that even, the distribution between the two IACs should be made according to the trades or lines of business in which the companies are engaged.
- (iii) In other charges, the cases of such foreign companies and their senior executives and directors may be assigned to one IAC each in addition to his other work, which may be reduced to the extent considered necessary by the Commissioner by suitable reallocation of work between the various IACs. However, where an IAC (Assessment) is in position, such cases may, to the extent possible, be also assigned to bim.

- (iv) In multi-Commissioner Charges, all the cases of foreign companies and their senior executives and directors should, as far as possible, be brought under the charge of one or two Commissioners of Income-tax.
- (v) As far as cases of foreign companies with income below Rs. 5 lakhs are concerned, it will be useful to bring them together with one or more ITOs, depending upon the workload, in the same Commissioner's charge as referred to in sub-para (iv) above. A beginning could be made for this purpose in metropolitan towns alike, Bombay, Calcutta, Delhi, Madras. Here also, the cases of senior executives and directors of a company will be assigned to the ITO dealing with the cases of the Company.
- 2. The Board desire that action should be initiated immediately to implement the above decisions and the proposals for the transfer of eases, wherever necessary, may be sent to the Board expeditiously.

Yours faithfully,
Sd/(M. L. CHOUDHRY)
SECRETARY
CENTRAL BOARD OF DIRECT TAXES

Recommendation

There is more than enough evidence that the multi-nationals in the field of computers and data processing equipment, such as IBM with its near-monopoly position in India, have defrauded the country of enormous revenues by resorting to various unfair practices like transfer pricing under the garb of inter-company billing system, misuse of import entitlements, exaggerated claims of drawbacks, underpayment of excise duty, exaggerated claims of depreciation, development rebate, head office expense etc. All these practices have enabled them to reap high profits at the cost of the exchequer as well as the technological development of the country.

[Sl. No. 83 (Para No. 6.181) of Appendix XIV to 221st Report of the PAC (Fifth Lok Sabha)].

Action taken

The position in regard to the recommendations of the Committee on the claim of depreciation. development rebate and head office expenses is as under:—

Regarding development rebate kind attention of the Committee is invited to action taken notes on recommendations contained in para-

graphs 6.174, 6.176 sent to them vide F. No. 241 38 76-A&PAC-I dated 27-7-76 and F. No. 241/39/76-A&PAC-I dated 2-8-76 respectively.

As regards depreciation allowance the Committee may kindly see this Department's action taken note on their recommendation contained in paragraph 6.176 of this report which was sent to them vide F. No. 241 40 76-A&PAC-I. dated the 2nd August, 1976.

In so far as the claim of head office expenses is concerned it may be recalled that the Committee had recommended in para 3.36 of their 187th Report that the entire issue of head office expenses of IBM should be gone into by the Inter-Ministerial Working Group set up by the Govt. The Report of the Working Group is still awaited from the Department of Electronics.

[Department of Revenue & Banking F. No. 241 41 76-A&PAC-I & F. No. 500-17 76-FTD).

Recommendation

The Committee are confident that if the powers available to the Government under the Foreign Exchange Regulation Act are used with prudence and determination, it should be possible to ensure that the foreign companies, including multinationals which are allowed to function in the country, conform strictly to the laws of the land and serve the objectives of development and are in any case sternly prevented from indulging in impermissible activities. The Committee expect that Government will soon be in a position truly to craim that such foreign operators have been curbed and shown their place in a self-respecting country like ours.

[Sl. No. 85 (Para 6.183) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)].

Action taken

Government have taken note of the observations made by the Committee in regard to the operations of multinational companies in the country. Adequate powers have been taken by government under various enactments, including the Foreign Exchange Regulation Act, 1973 to regulate and supervise the operations of these companies. Enforcement authorities are also on the alert and if any foreign companies or otherwise indulge in impermissible activities, penal provisions of the regulations will be strictly applied.

[Deptt. of Electronics No. 275(1)75-DE (Para 6.183) dated 22-1-77].

Recommendation

The Committee learn that the Working Group on Computers, Controls and Industrial Electronics of the Task Force on Electronics and Communications of the Planning Commission has estimated that there would be demand for 800 small and mini-computers in the country during the years 1975-76 to 1978-79. The demand for medium size computers according to the same estimate would be 208, while that for large computer installations 12. However, taking into account the some limited current awareness of how well the computer can be used for development and the constraints on expanding this awareness, the Electronics Corporation of India have estimated that the demand for computers in the small and medium class during the period 1974 -- 79 will be about 650 installations only. The Committee feel that projections for the future demand of computers should be based on more realistic considerations as any effort to evolve an effective strategy directed towards sulf-sufficiency in the field of computers would be meaningless in the absence of a reliable qualitative and quantitative estimate of the demand that exists now and is likely to arise in the country in the future.

[Sl No. 86 (Para 763) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)].

Action taken

The estimates made by the Working Group on Computers, Controls and Industrial Electronics of the Task Force on Electronics and Communications of the Planning Commission are outer limits and were made on the basis of a macro-model using various criteria and assuming a linear growth in demand in various sectors of the economy, presuming a legitimate optimistic absorption into these sectors during the Fifth Plan period. These estimates have been utilised for drawing up a growth programme for different computer requirements classified into three levels of systems *i.e.*, maxi, midi and mini. Panels were set up to go into some of the aspects relating to setting up of large regional computer facilities and also for the analysis of requirements for mini-computers and micro-processor. Based upon the recommendations of Technical Panels, licensing action has been taken, and also a number of development projects have been assigned to various agencies. It is to be realised that the first estimates have been used essentially as inputs for a broad planning of the industry e.g. to define whether production could be planned or whether the requirements were so small as to be limited to imports only. A close monitoring of the production levels achieved in industry the degree

of adoption of computers by user agencies, the successful promotion of meaningful applications and generally the build-up of confidence levels in the role of computers in national development and a periodical review of the demand projections will be continuing activities. Currently, the calculator industry which was licensed in 1972 is to be reviewed and studies of other areas will continue to be carried out by the Department from time to time. Year to year execution actions are based on extrapolations over much smaller time periods.

[Department of Electronics No. 275(1)/76-DE(7.63) dated 15-10-76].

Recommendation

An analysis of the status of the computer industry in India and indigenisation capabilities reveal that the present indigenous effort in the production of computers is very limited. Currently the only indigenous computer manufacturing programme in the country is that of the Electronics Corporation of India, who are at present manufacturing only computers in the mini and small range (TDC-12, TDC-312 and TDC-316). Although developmental work on a medium scale computer (TDC-332) is stated to be in progress, actual production is anticipated only in 3 to 4 years time. The manufacturing programme in ECIL began in 1969, but till now, only some 60 systems have been produced and installed.

[Sl. No. 87 (Para 7.64) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)].

Action taken

1. The computer population in the country has increased from 180 No. in 1971 of which 108 were IBM 1401 & 16 were IBM 1620 systems) to about 320 systems as of June 1976, of which nearly 70 systems are supplied and installed by ECIL and 19 are large imported computer system from a wide range of manufacturers. The mix of these in terms of the types of computers and application areas has changed in a significant way; also the increase in computing power greatly exceed the simple increase in the number of computers. Several large computer systems have been imported into the country providing significant increase in computing power; the number of such systems needed has been too small to justify their production in the country. A list of computers imported into the country since 1971 when the Electronics Commission came into existence is at annexure. As a result to the strategy adopted by the Department of Electronics the growth in numbers has been mainly recommendations of the Panel on Mini computers set up by the Electronics Commission, users in India are becoming increasingly aware of the potential of mini computers for a wide range of applications ranging from dedicated applications in industrial control, to educational, scientific and Research & Development applications to stand-alone systems for management information systems, data base applications etc. Import of mini computers have been permitted to enable priority sectors of applications to be developed rapidly, and the conviction for the broader application potentiality of mini computers will have the way for an effective indigenous mini computer industry to be ushered in the country.

- 2. The indigenous effort in the field of production is not restricted to the manufacturer of the final systems alone such as the TDC-12, 312 and 316 systems by ECIL. Considerable efforts are being put into the building up of manufacturing capabilities relating to components subsystems and peripherals. Thus the semiconductor complex being set up by the Department will ensure supply of LSI IC chips, semiconductor memories, display devices etc. Projects have been funded at BEL, Bangalore for development of electromechanical mini peripherals and are progressing satisfactorily. Further a limited number of licences for the manufacture of mini computers by entrepreneurs using their own foreign exchange for sourcing raw materials. components and peripherals have been issued. Considering the lead times involved in establishing production of complex electro-mechanical peripherals, licensing for a range of peripherals such as low-speed magnetic tape units, alphanumeric displays, data entry systems based on cassette tape drives floppy disks, non-impact printers etc. have been approved. Further approvals for indigenous manufacturing programmes for mini computers and a range of peripherals will be given luring the next year.
- 3. The TDC Working Group on Computers has prepared a comprenensive Technology Development Plan covering the entire spectrum of Computer Hardware, Software and Peripherals. The report covers (i) identification of areas requiring intensive Research & Development efforts and purchase of technology (ii) assigning relative priorities between them (iii) reviewing the present capabilities and identifying the areas of strength of various organisations in the country (iv) evolving, financing and monitoring individual Research & Development projects and (v) ensuring smooth transfer of know-how generated from Research & Development to production. This report is being submitted to the Technology Development Council set up by the Electronics Commission to meet the above objectives in the field of Electronics.

4. As regards the indigenous computer programme the industrial capacity of the Electronics Corporation of India (ECIL) has been increased from 25 systems to 50 systems per year since 1975. After the successful development and marketing of the Analogue computers and the Digital computers as TDC 312 and TDC 316, it is now anticipated that the TDC 332 system will become available by 1978. The production turnover of ECIL on Digital computers alone has been increasing from about Rs. 1 crore in 1972-73 to Rs. 2 crores in 1973-74 and Rs. 3.77 crores in 1974-75 and Rs. 4.34 crores in 1975-76. It would thus be seen that a progressive increase in the production levels has been maintained and over 77 systems have now been productionised.

[Department of Electronics No. 275(1) 76-DE, dated 23-10-1976]

ANNEXURE-I

LIST OF COMPUTERS IMPORTED IN INDIA (AFTER 1971)

Ans. b (iii)

S. No	. Installation					Manufacture	Model No.	Cost (approx.) in Rupres		
(1 ⁾	(2					(3)	(4)	(5)	(6)	•
1.	ADE, Bangalore		•		•	DEC	PDP 11/35	20,00,000	D fence R & D	
2.	AllMS, New Delhi					НР	21 MX 55	30,00,000	Medical Research	
3.	Army H. Q.		•	•		IBM;	360/30	30,00,000	Defence Application	188
4.	ASCI, Hyderabad.	•	•		•	RYAD	R-1030	50,00,000	Training & Software Export	
5.	BARC, Bombay			•		DEC	PDP 8/E	12,00,000	7	
6.	BARC, Bombay	٠			•	RYAD	BESM 6	80,00,000	Atomic Energy Research & Development.	
7.	BARC, Bombay					HUNGARY	TPA12	20,00,000)	
8.	BEL, Bangalore		•		•	ICI.	1902/S	60,00,00 0	j	
9.	BEL, Bangalore	•	•			DEC	P DP 11/35	20,00,000	Production and Inventory Control, Manage-	
10.	BEL. Bangalore.	•		•		DEC	PDP 8/E	12,00,000	ment Information. }	
11.	BOKARO, Bhilai.		•	٠	٠	IBM	1800	40,00,000	Production Control. F	
12.	CMTI.	•			•	DEC	PDP 11/40	25,0 0,000	Numerical Control & Machine Tools.	

	•					· .
(1)	(2)				(3)	(4)
13.	COMPUTRONICS			•	RYAD	R-1020
14.	Delhi University	•		•	IBM I	360/44
15.	DP Cell, Delhi. 📗 .	•			DEC	PDP 11/35
16.	BCIL, Hvderabad.	•			CII	IRIS-551
17.	EIL, Delhi.	•	•	•	BMEJ	R1040
18	ICRIS VI, Hydrabad.				DEC	PDP-11/45
19.	III, Bombay."]			•	RYAD	R = 1020
20.	IIT, Kanpur.			•	IBM]	1800
21.	IIT, Kharagpur.	•	•		RYAD	R 1030
22.	IIT, Madras	•	•	•	1BM	370/155
23.	IIT, Madras	•	•		DEC	PDP-11/10
24.	IISc., Bangalore.	•		•	IBM	360/44
25.	IMD, Delhi. , ,		•		IBM	360/44
2 6.	IPAG, Delhi	•	•		НР	2100
27.	ITI, Bangalore	•	•		DEC	PDP-11/05
28.	Instrumentation Ltd., Kota	. .	•	•	IBM	1800
29.	ISSP, Bangalore		•	•	DEC	PDP-11/40
30.	JNU, New Delhi.		•	•	IZOT (Bulgaria)	F-1030

(6)

30,00,000 Service Bureau, Sostware Export.

144,00,000 Training and R & D.

[20,00,000 Defence Applications.

55,00,000 Research & Development of Computers.

[60,00,000 Engineering Application of EIL, Commonuser Centre of Delhi area, Software Export.

[30,00,000 Research & Development.

[30,00,000 Training.

[40,00,000 Training.

\$50,00,000 Training.

1,55.00,000 Training & R & D.

£10,00.000

744,00.000 Training & R & D.

44,00,000 Meteorological Applications.

[21,00,000 R & D.

5.00,000 Production Control.

40,00,000 Production Control.

25,00,000 Space Application.

30,00,000 Education.

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2109	31.	Kirloskar, Poona.	•	•	•		ICI.	1903
	32.	LRDE, Bangalore.	•	•	•		DEC	PDP-11/40
LS	33.	ONGC, Dehradun.	•		•	•	IBM	370/145
8	34.	ORG. Vadodara.	•		•	•	RYAD	R-1030
	35.	PRL, Ahmedahad.				•	IBM	360,44
	36.	REC, Warangal.		•	•		DEC	PDP-8
	37.	Signals Directorate.	•		•		IC:L	1904
	38.	Space Centre, Sriharik	ot a.	•	•		CII	IRIS-60
	39.	SLV Project, Trivand	rum.		•		DEC	PDP-11/40
	40.	TCS, Bombay.	•	•	•	•	BURROUGHS	1700
	41.	TCS, Bombay .	•	•	•	•	ICL	1903
	42.	TCS. Bombay .		•	•	•	BURROUGHS	6700
	43.	TIFR. Bombay.		•	•	•	DEC	DEC-10
	44.	TIFR, Bombay	•	•			DEC	PDP-11/20
	5.	TIFR, Bombay.	•			•	DEC	PDP-11/45
	4 6.	Vikram Sarabhai Space	· Cen	itre, T	Chuml	эа.	IBM	360/44
	47.	VEC Project, Calcutta.		•	•	•	DEC	PDP-15/76

30.00.000 Production and Inventory Control.

30.00.000 Defence R & D.

1.10,00,000 Scismic Work.

50,000,000 Software Export.

44,00,000 R & D Space Applications.

12.00.000 Education.

40,00,000 Defence Applications

60,00,000 R&D Space Applications.

25,00,000 R & D.

40,00,000 Software Export.

30,00,000 Software Export.

67,00,000 Software Export.

1,50,00,000 %

15,00,000 R & D.

30,00,000

44,00,000 R & D Space Applications.

17,00,000 R & D.

Recommendation

It is further seen that even the present indigenous computer manufacturing programme is largely based on imported peripherals (input-output equipment) and components (such as semi-conductor devices, ferrite core memories etc.). Except for the systems engineering and design capability where indigenisation is stated to have been largely achieved, ECIL is dependent significantly on imports for vital components and materials. So far as the peripherals are concerned the country has still to make considerable leeway in indigenisation.

[Sl. No. 88 (Para 7.65) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha).]

Action taken

Manufacturing programmes of some of the foreign companies operating in India are being modified to meet the requirements of some of the sophieticated peripherals required for the indigenous programmes. Sophisticated matrix printers proposed to be manufactured under the TCS-Burroughs programme, manufacture of peripherals such as card readers, line printers and magnetic tape units proposed in the revised ICL programme would meet indigenous requirements. A programme with foreign knowhow has been approved for manufacture of exchangeable discrives on the basis of a guaranteed level of export. Other peripherals are in different stages of development in the country. The Semi Conductor Complex, which has been approved by the Cabinet, would embark on production of large scale integrated circuits to be used as memories and logic elements of the mini-computers and micro-processors

DE-7.65 dt. 25-8-19761

Recommendation

Bharat Electronics Ltd., another public undertaking engaged in the manufacturing activities relating to computers is stated to have built up considerable competence and expertise in the computer and computer peripheral area, both with regard to indigenous design and development activities as well as production activity. Its present manufacturing activities, however, are restricted to the manufacture of a limited number of ICL 1901A computers (only Electronics portion) under the terms of an agreement with the International Computers Indian Manufacture Ltd., which is an ICL associated company.

The Government of India has so far licenced ICL for production of only 32 Nos, of 1901 systems, out of which BEL has already manufactured and supplied 27 and would be making the balance, that is, five, during the course of another year.

[Sl. No. 89 (Para 7.66) of Appendix XIV to 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

- 1. The above statement of PAC is correct.
- 2. Consideration is being given to the introduction of a new computer system of the ICL 2903/2904 series, to be manufactured by the International Computers Indian Manufacture which will be converted into a 60 per cent majority Indian Company of after amalgamation with the present 100 per cent for (UK) Equity Co. ICL (India). The details of this possible manufacturing programme including the role of BEL in this is under examination at present. The capabilities of BEL in the field of peripherals is being fully supported.

[Department of Electronics No. 275(1)/76-DE dated 15-10-19761

Recommendation

Keeping in view the large demand for computers and data processing equipment as projected in the estimates for the Fifth and Sixth Plan intensive efforts require to be made to step up the production of indigenous computer systems.

[Sl. No. 90 (Para 7.67) of Appendix XIV to 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

- 1. Noted for action.
- 2. Under the Technology Development Council, the current programmes of ECIL relating to the TDC-12, 312 and 316 computers are being fully supported; as also the development of the larger TDC-332 system. Financial support has also been given under this programme to BEL for the development of mini-peripherals and to KSEDC for 18 columns printer: Letters of Intent have been issued to a number of units for manufacture of peripherals for mini-computers such as Floppy disk drives, cassette drives, alphanumeric displays etc. Licensing action for mini-computers is on hand. Under

FERA, ICL have proposed the merger of ICL & ICIM and reduction of foreign equity to 40 per cent with fresh issue of Indian capital and a manufacturing programme to produce the 2903, 2904 series of mini-computers and a line of peripherals; this is under examination. The production of Semiconductor devices at BEL and in several other private sector companies and the programme to manufacture MOS, LSIs and LEDs at the Semiconductor Corporation will establish self-sufficiency in the field of primary semiconductor components for the computer industry. These and several other licensing/Promotional/Technological support initiative on hand should enable the country to reach significant self-sufficiency in the computer field during the Sixth Plan.

[Department of Electronics No. 275(1)/76-DE dated 25-8-1976]

Recommendation

The Committee note that the strategy developed for attaining self-reliance in the field of computers has the following four main elements:—

- (a) Ensuring that the direction and pace of advance of production capacity for computers and allied equipment, as also the availability of appropriate computational facilities both for direct use and for supporting the development of software tools are determined by national needs, priorities and requirements;
- (b) The Key-segments of the computer industry are under national control and free from any monopolistic trends,
- (c) That a viable indigenous programme of production of computer hardware and software is built up to meet national requirements and to generate surpluses for export; and
- (d) That over a period of time, a substantial part of the technology needed for the design and production of systems, components and materials and also the supporting software is generated through indigenous research and development; what is more, that such technology will be appropriate to our needs and over a period of time become contemporary in terms of international availability.

[Sl. No. 91 (Para 7.68) of Appendix XIV to 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

- 1. The Department agrees with the excellent summary by PAC above, of the basic strategy being followed by the Department of Electronics to attain self-reliance in the field of computers.
- 2. In keeping with the strategy outlined above, the Department of Electronics has been endeavouring to approve of industrial licences in the case of a number of agencies in the small scale as well as the organised sectors of indigenous production of contemporary computer hardware (Central Processing Units components and peripherals). A close watch is being maintained on the programmes approved to ensure that such programmes are implemented within reasonable time-frames. The role of foreign companies is maintained and controlled, particularly through the provisions of FERA to ensure that they are not in commanding positions in this field. A number of centres for software development have also been built up with a view to develop software for export purposes as well as meeting the national requirements. Support is being provided for the indigenous development through the Technology Development Council of the Electronics Commission.

[Department of Electronics No. 275(1)/76-DE dated 15-10-76]

Recommendation

The Committee also note that the Technology Development Council of the Electronics Commission has funded a number of research projects in R&D laboratories like Tata Institute of Fundamental Research and two production units like ECIL and BEL to develop CPUs. Software and Peripherals for manufacture of small and medium-sized computers. The Bharat Electronics and Hindustan Teleprinters are understood to have developed, on their own, prototype of certain peripherals such as paper tape readers, paper tape punches and matrix type printers. The Department of Electronics has also given design and development grants to BEL through the Technology Development Council, for the design and development of more sophisticated peripherals like Card Readers, Line Printers and Magnetic Tape Transports.

[Sl. No. 92(Para 7.69) of Appendix XIV to the 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

The Department of Electronics has approved of a number of development projects in the field of computers to various organisations as listed below:—

Sl.	•	Name of the Institution
î	Development of Block Diagram Lang- uage Compiler.	
2	Modular Keyboard/Cassette/CRT Printer terminal for on-line or off-line usage.	IIT, Kharagpur
3	ADGES Project (Computers for Air Defence Systems)	Tata Institute of Fundamental Research. Bombay.
4	Exploitation of full Potential of TDC—12 and Software Development.	ECIL, Hyderabad.
5	Development of 32 bit computer	ECIL. Hyderabad.
6	Software Development	ECIL, Hyderabad.
7	Development of Computer peripheral Equipments.	BEL, Bangalore.
8	Development of Mini-computer	Jadavpur University, Calcutta.
9	Adaptation of Mini-computer as Time Averaging Computer.	Jadavpur University, Calcutta.
10	Development of Computer Networks .	National Centre for Software Develop- ment & Computing Techniques (at TIFR), Bombay.
11	Development of 18 Column Printer .	Kerala State Electronics Development Corporation, Kerala.
12	Indigenous Development of Hybrid Computer: Development of application software packages: and user training in Hybrid computation.	Indian Institute of Science, Bangalore.
13	Computerised Hospital Information System	IIT, Madras.
14	Evaluation of Peripherals from East . European Countries.	EC1L, Hyderabad.
15	Steel Distribution System	Systems Research Institute, Poona.
16	Automatic Electronic	Tata Institute of Fundamental Research, Bombay.

Recommendation

Certain indigenous manufacturing firms in the private sector who have the capability of undertaking design and development activity in the field of computers have also been identified and the question of utilising them for this purpose is under consideration.

[Sl. No. 93(Para 7.70) of Appendix XIV to the 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

A number of firms in the private sector have been issued letters of intent for manufacture of mini computers, micro-processors, micro-processor based cash registers and peripherals. A number of such firms are also registered as Research & Development units with the Department of Science & Technology. The capabilities developed by these units will be utilised for building up the computer industry. Some of these firms in the private sector are also engaged on software export activities. It is also being ensured that these activities in the private sector are not assigned to majority foreign equity firms except for significantly export oriented programmes.

[Department of Electronics No. 275(1)/76-DE dated 15-10-761

Recommendation

The Department has finalised the proposals to set up the Semiconductor Corporation for making large scale integrated circuits indigenously in the public sector.

> [Sl. No. 94(Para 7.71) of Appendix XIV to the 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

This Project is an approved one under the Fifth Five Year Plan of Department of Electronics. It has been cleared by the Planning Commission; and is included for start of implementation in the Annual Plan for 1976-77.

A note outlining the proposal was submitted to the Union Cabinet, which accorded its approval in May 1976 to the setting up of the Semi-conductor Complex.

A Site Selection Committee was appointed to make recommendations regarding suitable sites for this Complex. The Committee

has recently submitted its report which is under the consideration of Government.

A Project Director has been appointed and a Project Office has been set up. Recruitment of staff has been initiated. Several aspects concerning the implementation of the Project are being pursued. These include; working out the precise product mix (in terms of equivalent device types available abroad); working out the precise manner in which production should be phased; negotiating with vendors abroad for technology equipment and raw materials; working out the organisational structure; the phasing of requirement of staff; action for obtaining license for manufacture and import of capital goods.

[Department of Electroni's No. 275(1)/76-DE(7.71) dated 15-10-76]

Recommendation

The Committee note that there has been phenomenal increase in the Semi-conductor Industry and that already large scale integrated circuits are available which incorporate as many as 20,000 transistors, diodes and other elements on a single chip. Technology is stated to have been developed elsewhere in the world which can bring products into the markets having close to 1,00,000 transistors, diodes and such other elements on a single chip within the next three years. Several companies abroad are in advanced stage of research for putting a million gates on a chip.

[Sl. No. 95 (Para 7.72) of Appendix XIV to the 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

Semi-conductor technology abroad has shown phenomenal progress; and large scale integrated circuits with about 16 000 transistors on a single chip are commercially available. Efforts are continuing to increase the complexity of large scale integrated circuits further. Calculator chips, memories and microprocessors are some of the large scale integrated circuits being produced today.

The Semi-conductor Complex under the Department of Electronics has been proposed to undertake the manufacture of large scale integrated circuits that includes calculator chips, memories and microprocessors as also display devices such as light emitting diodes (LEDs). A Research & Development unit being set up as an integral part of the Complex so as to continuously update the technology

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that will be partially imported initially-enabling the technology to be kept at the contemporary level. A principal objective of setting up the Semi-conductor Complex, (apart from commercial viability in an important upstream area of the electronics industry), is to achieve strategic self-reliance.

[Department of Electronics No. 275(1)/76-DE dated 15-10-761

Recommenditon

The Committee note that according to the Department of Electronics reqirements of large sized computers, and some sophisticated peripherals and components would continue to be met by imports even after the Fifth Plan period.

[Sl. No. 96 (Para 7.73) of Appendix XIV to the 221st Report of P.A.C. (Fifth Lok Sabha)]

Action Taken

Currently, computers in the class of mini-computers, as also small, medium and large computers are being imported for various application areas identified as high priority and inescapable, and for which the indigenously produced computers such as TDC-312 and 316 would not be adequate or suitable. With the gradual establishment of our own mini-computer industry, and with the development of adequate software on the TDC-316 computers, imports of minicomputers and small-sized computers will be gradually phased out. The TDC-332 computer, that is now under development in ECIL, would meet the requirements of some of our medium-sized computers by the end of this plan period. Subsequently, import of computers will be essentially confined to the larger systems only. A number of peripherals, developed indigenously through grants provided by the TDC, such as paper tape readers, punches, matrix printers, card readers etc., will shortly be productionised. Most of the peripherals for the mini-computers and some of the peripherals for the small and medium computers would thus be productionised in the country through approved indigenous manufacturing programmes, through foreign collaboration with export commitments, or through the programmes of foreign computer companies co-operating in India. There would however still be requirements for some sophisticated disk drives and very special types of peripherals such as plotting devices, multicolour displays etc., which would continue to be imported for specialised applications. The strategy is to build up manufacturing capabilities and to consolidate the national position in areas where large demands exist or are likely to arise and Commercial viability is highly likely.

[Hepartment of Electronics No. 275(1)/76-DE dated 15-10-76]

Recommendation

The Committee would like to point out that technology in computer industry has been growing at a fast rate and that even in terms of sub-systems, technology is available from a very large number of sources. For example for CPU, it is understood that there are atleast 40 independent manufacturers from whom technology could be bought and for peripheral units the numbers is twice as large.

[Sl. No. 97 (Para 7.74) of Appendix XIV to the 221st Report of P.A.C. (Fifth Lok Sabha)]

Action Taken

The Department of Electronics is aware of the large number of independent manufacturers for CPUs and peripherals the world over and that technology for these would be available from a large number of sources.

In the computer industry there are a number of independent manufacturers who can deliver products with similar capabilities. Even different technologies are available for similar end products. For example, line printers are available from more than 15 standing manufacturers in different types such as drum type, chain printer; impact printers, non-impact printers, thermal printers etc., each having its own advantages and limitations. There are more than 20 prominent manufacturers for disk drives and magnetic tapes abroad. This is also true for application software. There are a number of software houses apart from the main frame manufacturers, who can deliver packages such as Data Base Management Systems. Information retrieval and Report Generating packages, data Communication monitors, statistical forecasting systems general ledger accounting, utilities such as sort, merge etc.

With regard to CPUs, there is sufficient capability within the country for indigenous design and development and it is only the lack of a semi-conductor industry for making medium-scale and large scale integrated circuits which makes us dependent on imports for building up such CPUs. With regard to peripherals, manufacturing programmes are being approved on the basis of indigenous know-how or that obtained from abroad (largely on the basis of export commitments). Whilst undertaking indigenous development within the country, technologies adopted by various independent manufacturers abroad are studied and assessed before our own

developmental activities are undertaken. The Department of Electronics have also encouraged the oringing in of proto-types by our development and production agencies for purposes of study and evaluation.

[Department of Electronics No. 275(1)/76-DE (7.74) dated 15-10-76]

Recommendation

The Committee also note that according to the Department "it, the computer industry, there is no such thing as exclusive knowhow for which alternative do not exist".

[Sl. No. 98 (Para 7.75) of Appendix XIV to the 221st Report of P.A.C. (Fifth Lok Sabha)]

Action Taken

By and large, for a variety of areas of applications, a number of alternatives do exist and one would not be put into a difficult position for reasons of knowhow being too exclusive. For some very specialised areas of applications, knowhow that may be available on an exclusive basis would quite often not be easily forthcoming or will prove to be very expensive. In such cases there is no alternative but to invest on indigenous development to cover the gaps in technology; or to obtain knowhow from the exclusive source on the basis of well conducted negotiations.

Department of Electronics No. 275(1)'76-DE dt. 15-10-75]

Recommendation

The Committee feel that broadly speaking the approach of the Department of Electronics is on the right lines. What is required is time-bound and achievement-oriented action. Apart from the need for setting up the Corporation in the public sector for manufacture of Semi-conductors and Maintenance of Computers, it is imperative that a close and integral link with the Electronics Corporation of India—the pioneer in the field—is constantly maintained.

[Sl. No. 99 (Para 7.76) of Appendix XIV to the 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

The need for close links between the Department of Electronics and the Electronics Corporation of India Ltd. is fully recognised. There is in fact, a close working relationship between Department of Electronics and Electronics Corporation of India Ltd. based on

mutual consultation and interaction in respect of new developments in the electronics industry and technology. An integral link also exists by reason of the Managing Director, Electronics Corporation of India Ltd. being a member of the Electronics Commission. The General Manager of Electronics Corporation of India Ltd. is also a Director on the Board of Management of the Computer Maintenance Corporation. A Senior Scientist from the Computer Division of ECIL is also a Member of the TDC Working Group on Computers.

Many new projects have been taken up for development and manufacture by Electronics Corporation of India Ltd. at the instance of the Department of Electronics which has identified these as being in the national interest.

The Computer Maintenance Corporation has been set up and is expected to develop its activities on a rapid basis. The Union Cabinet has approved the setting up of the Semi Conductor Complex; action to implement this decision is on hand. There are time bound programmes for all these activities.

Whilst the importance of the pioneering activities of ECIL in the field of computers is fully recognized and supported, it must also be stressed that, in view of the importance of this field in all its ramifications for the country (in terms of hardware, CPUs, peripherals, components, software-basic, application export etc.) it is desirable to broaden the bases of national capabilities and not restrict our approach to the programmes that ECIL can and will undertake. Department of Electronics is thus supporting Bharat Electronics Ltd., Kerala State Electronics Development Corporation, Research & Development Institutions etc. as also various agencies in the indigenous private sector.

[Department of Electronics No. 275(1)/76-DE dated 15-10-76]

Recommendation

The Committee understand that after an extensive analysis about the kind of computer technology which was relevant to the Indian conditions, the Information, Planning and Analysis Group of the Electronics Commission has come to the conclusion that about 75 per cent of computer capacity requirements of the country could be met through mini-computers and mini-computer networks and the remaining 25 per cent through maxi-computers. The Department of Electronics has accordingly been directing its efforts towards establish-

ment of a mini-computer industry in the country and an active promotion of applications for introduction of mini-computers in various sectors relevant to national development. The total national demand of around 400 mini-computers by 1978-79 is expected to be met through indigenous production. How this target of production will be reached is however not clear, as presently only some applications from the prospective entrepreneurs for grant of industrial licenses have been received and are being processed. Since mini-computers are to be used for a large proportion of our computational requirements in future and they can very well replace the old and obsolete IBM 1401 machines etc. the Committee desire that the Department of Electronics should work out time-bound schedules for creating the necessary infra-structure for the production of these computers.

[Sl. No. 100 (para 7.77) of Appendix XIV to the 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

In consideration of the fact that the peripheral industry (which is based largely on electro mechanical techniques) takes a longer time to develop, the Department of Electronics has taken anticipated, licensing action with regard to a range of peripherals for the minicomputer programme; and promotional action, in terms of financial support from TDC for developed projects is well in hand. Limited licences for manufacture of mini-computers and also micro-processors and micro-processor based telecommunication systems and cash registers have also been given. The mini-computer CPU programme is now being licensed and it is hoped that this programme will build up significantly by the end of this plan period. Work on Computer networks is in hand in National Centre for Software Development & Computing Techniques (NCSDCT) at Tata Institute of Fundamental Research (TIFR) Bombay. The mini computer & microprocessor capabilities will increasingly depend on the capabilities of the Semi-conductor industry to produce LSIs and display devices-and the latter is therefore being pursued vigorously now. The strategy of Development of Electronics is to build up the base and infrastructure for this programme on sound lines; otherwise, purely a manufacturing activity for end equipment will turn out to be based essentially on imported semi-conductor devices, displays, peripherals etc. with large foreign exchange drain, and will not contribute to self reliance any more than direct import of mini-computers themselves.

[Department of Electronics No. 275 (1) / 76-DE-7.77 dt. 15-10-76]

Recommendation

Another important area where attention has to be paid is the development of computer software. A great deal of software has to be generated for a variety of computer applications, particularly using indigenously manufactured systems. The software generation also involves highly skilled manpower, which is abundantly available in the country. Moreover, because of the availability of skilled labour, this activity is eminently suited for export promotion. The Committee are glad that the Department of Electronics is fully conscious about the potentialities of software export from this country and they have already initiated action in various directions for software development. According to the Secretary, Department of Electronics the problem was not so much of development of software as of finding the right marketing outlets. The Committee would like the Department of Electronics to sustain its efforts till success is achieved.

Sl. No. 101 (Para 7.78) of Appendix XIV to the 221st Report of the P.A.C. (Fifth Lok Sabha).

Action taken

The Department of Electronics is playing a pivotal role in locating the right software market outlets. In this regard, the Department had submitted a feasibility report, after discussions with major software groups, for development and export of software into the European Economic Community (EEC Region). Also, the Department had prepared a brochure, titled 'Software from India', highlighting Indian software activities, for distribution to software houses in the countries concerned.

The Department has set up a cell in ETTDC (a Department of Electronics public sector undertaking) to promote software exports to East European Countries.

The Department is negotiating with the East European Computer Industry to take up software development in India for export to them for their computer manufacturing and application activities. Some such ventures are being taken up by Administrative Staff College of India. Hyderabad; Engineers India Ltd., New Delhi; Computronics India. New Delhi; Operations Research Group, Baroda and a few others. Tata Consultancy Services (TCS). Bombay has got software export countracts from Europe and USA. This activity is being grown consciously.

Other entrepreneurial software groups are being encouraged to use computer time at the Regional and other major centres of activity for building up export potential.

[Department of Electronics No. 275(1)/76-DE dated 15-10-1976].

Recommendation

For attaining the goal of self-reliance in the field of computers, the Committee feel that there is need for intensifying Research and Development. In this behalf a three-fold approach is called for:

- (i) There should be clear demarcation of duties and responsibilities, a major share being given preferably to R&D Sections of the production unit concerned.
- (ii) There should be closer coordination between the scientists and technologists so as to achieve viable production in the quickest possible time.
- (iii) Those concerned with R&D may hold periodically a workshop meeting where technicians/scientists concerned should present facts and prototypes etc. to bring out the precise progress achieved. To this meeting could be invited directors of manufacturing units in public sector, Research Institutions etc. so as to facilitate an objective and meaningful review of the progress made and to throw up concrete ideas to speed up progress.
- ISI. No. 102 (Para 7.79) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha).

Action taken

- 1. In order to deal with the area of Research & Development leading to production, the Electronics Commission has set up a Technology Development Council (TDC). The TDC Working Groups on Computers, Control & Industrial Electronics and Electromechanical computers and Assemblies have analysed the problems in depth. The Technology Development plan prepared by these groups is being widely publicised through the IPAG journal "Electronics-Information and Planning" and other media.
- 2. National seminars on R&D are being and will be held periodically (the first one was held in 1973) wherein all concerned in the production sector (private and public). Research & Development establishments, educational institutions and professional bodies are

invited to participate. The TDC Working Group had held intimate discussions with Computer Professionals at the annual convention of the Computer Society of India. While drafting its plan the TDC Working Group has also had considerable interaction with many of the Development & Production agencies as well as other specialists. Such dialogues will continue to be maintaitned during the implementation of the plan by co-opting representatives from these organisations, interacting with members of the Computer Society of India and other professional agencies during their annual conventions, seminars, conferences etc.

3. Considerable impetus is also being given to building up inhouse Research & Development by production organisation through funding of major projects. Many agencies have also been encouraged to register themselves as Research & Development units with the Department of Science & Technology which enable them certain facilities for import of components for carrying out development projects.

[Department of Electronics No. 275(1)/76-DS dated 15-10-76].

Recommendation

The Committee recommend that Government should draw up a plan outlining the general strategy for self-reliance in computers, and in particular, the manner in which it is proposed to meet the anticipated large requirements of mini-computers. In this context, the Committee note that as at present the manufacture of mini-computers would mostly be an assembly operation, since such items as memory cores, integral circuits, peripherals etc. are to be imported. In the circumstances, it is of the utmost importance that there should be a well thought out programme so that only the minimum number of units for whom work on long-term basis would be available are set up. The Committee would like Government to consider whether it would not be better in the circumstances, that the manufacture of mini-computers is developed either as a subsidiary or ancillary activity of the well established public sector units already in the field. The Committee need hardly point out that it is only after essential components like memory cores, peripherals, software, etc. are developed and manufactured in adequate quantities and made available at competitive prices so that small units in the cooperatives or private sector can be expected to undertake manufacturing activity in a meaningful manner.

> [Sl. No. 103 (Para 7.80) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)]

Action taken

- 1. Since it was set up in 1970 the Department of Electronics has been seized of the problem, among others, of ushering self-reliance in the field of computers. Under a Presidential order dated 29th August 1975, the Department has been entrusted with the task of "Co-ordination of requirements relating to electronic processing equipment (computers), matters concerning computer-based information, technology and processing, including hardware and software, standardisation of procedures and matters relevat to international bodies such as IFIP, IBI, ICC"; accordingly it has drawn up plans with a view to achieving self reliance in the field of computors as rapidly as possible.
- 2. Development of viable indigenous industry would call for concerted action on the following:—
 - (a) Procedure for import of computers.
 - (b) Streamlining licencing procedures.
 - (c) Development of indigenous equipment & components.
 - (d) Software development and export.
 - (e) Ensuring that foreign companies do not have a commanding position on their own in this field.
 - (f) Long range programmes.

Procedure for import of computers

Under the Allocation of Business Rules, procurement of computers by all departments of Government whether through indigenous sources or through import, is regulated by the Department of Electronics. Further, all computers irrespective of the value that have to be imported into the country need clearance by the Department of Electronics. The Cabinet has also approved of a special procedure whereby import of computers over a value of Rs. 5 lakhs cif will have to be approved by a High Level Committee consisting of the Chairman of the Electronics Commission, one Member of the Electronics Commission, Secretary Department of Economic Affairs and the Secretary of the concerned user department; the detailed procedure to be followed in the latter is given in Annexure I. As a result of these procedures it is being ensured that large scale indiscriminate import or induction of computers does not take place, particularly through sales pressures on the part of foreign companies. The first step in any policy for self reliance is avoid preemption of local markets and options.

Streamlining of licencing procedures

2.2. The licencing procedure for the grant of licences to potential manufacturers of computers and associated equipment has been streamlined with the result that a number of licences have been issued for the production of complex electro-mechanical peripheral equipment, magnetic tape units, data entry systems based on Cassette tape drives etc. Certain licences for the manufacture of mini computers have also been issued and further licensing action is on hand. Such licences are issued on the basis of a scrutiny of the products in terms of the long range technical viability for the Indian computer programming, the capability of the entrepreneurs, the commercial viability of the programme proposed and extent of planning carried out, as analysed by Technical personnel.

Development of indigenous equipment and components

2.3. Development of some peripherals such as paper tape readers and punches and mosaic printers have been successfully completed. Development of other electro-mechanical peripherals is progressing satisfactorily at Hindustan Teleprinters Limited, Madras, Bharat Electronics Limited, Bangalore, Kerala State Electronics Development Corporation and Electronics Corporation of India Ltd. Hyderabad. Financial support for development of several peripherals has been given by the Technology Development Council, the Electronics Commission. Production of computer hardware and peripherals has been encouraged, as also the production of other data processing equipment. Thus, production of various equipments in the category of computers, control and instruments reached a figure of Rs. 58.5 crores during the calendar year 1975 as against Rs. 34 crores and Rs. 22 crores during 1974 and 1973 respectively. A Semiconductor Complex for production of large scale Integrated Circuits Displays is being set up under the administrative control of the Department of Electronics.

Software development and export

2.4. The Electronics Commission has supported through grants the Electronics Corporation of India Ltd. in the development of software for TDC-12, TDC-316 and TDC-332 computer systems. The National Centre for Software Development and Computing Techniques (NDSDCT) at Bombay has undertaken development of software tools and software for computer-networks. A number of other software houses in the country like Administrative Staff

College of India, Engineers India Limited, Computronics India, Operations Research Group, Tata Consultancy Services etc. have undertaken software projects for both Indian and foreign companies. Software to the tune of Rs. 85 lakhs has been exported during the calender year 1975 as compared to Rs. 20 lakhs during the previous year. The build up of local software capability, will enhance considerably the application possibilities of indigenous computer systems.

Foreign Companies

2.5. The programmes of foreign companies such as IBM and ICL are being modified in terms of FERA. IBM, a 100 per cent foreign equity company, would only be permitted to carry on 100 per cent export-oriented manufacturing programmes. As regards ICL, consideration is being given to introduction of a new computer system of the ICL 2903/2904 series to be manufactured by International Computers Indian Manufacture which will be converted into a 60 per cent majority Indian company. A proposal for a joint-venture between Burroughs of USA and Tata Consultancy Services is being considered for purpose of building up a highly export-oriented activity in the field of software and computer peripherals. The proposed programmes of International Computers India Manufacture (ICIM) and the Burroughs-Tata Consultancy Services joint venture would also support the indigenous industry by building sophisticated peripherals for use in the country to the extent as may be cleared by the Government

Long Range Programmes

- 2.6. The Department of Electronics has formulated plans, as highlighted in the Perspective Report on Electronics published by the Electronics Commission, for the manufacture of computer systems, for various applications. The manufacturing programmes in Public Sector Undertakings as Electronics Corporation of India Ltd. Hyderabad, Bharat Electronics Ltd. Bangalore & Hindustan Teleprinters Ltd. Madras are being enlarged and strengthened. Simultaneously encouragement is being given to the small scale and organised sectors to participate in the programme on the basis of their practical skill and potentialities.
- 3. The manufacture of mini-computers to suit various application areas can be done by many agencies particularly those who have close familiarity with the needs of the end user. At this level the task is of system engineering application software generation and

electronic assembly operations. This can be done, once the basic components (like LSI chips, memory units, displays) and peripherals are available to them. The production of these components and peripherals need not necessarily be restricted to the present public sector computer manufacturers such as ECIL. The manufacture of components and peripherals will be organised on a wide basis in view of the variety involved; LSI chips and LED displays will however be restricted to the Semi-Conductor Complex for manufacture.

T[Department of Electronics No. 275 (1)-76-DE Para No. 7.80 dt. 10-11-1976)]

ANNEXURE I

DEPARTMENT OF ELECTRONICS

COVERNMENT OF INDIA

POLICY GUIDELINES FOR IMPORT OF COMPUTERS

(AS APPROVED BY THE CABINET ON 4TH DECEMBER, 1975)

The procedure as outlined below will be implemented by the Department of Electronics for import of computer system over a value of Rs. 5 lakhs c.i.f.

(a) Step-I (Action by users).

Each user will outline the application for which a computer system has to be obtained through import, is necessary. On the basis of such defined usage, the user will draw up functional specifications, based on his current and anticipated applications. In the case of general-purpose Government user such as, Customs, Income-Tax, Audit and Insurance, with offices/units located in Delhi, and which are either already using the Computer Centre of the Department of Statistics or can be expected in terms of their requirements, to do so in the future, the Department of Statistics will be consulted, as necessary.

(b) Step-II (Action by Department of Electronics)

The justification for the applications envisaged, in terms of national priorities as laid down by the Electronics Commission from time to time, and the related specifications, will be scrutinised by the Department of Electronics (Computer Directorate): the Department will approve, in principle, the need for the import of a computer system with a certain functional configuration, which as a result of the technical scrutiny, may be different from that proposal by the user. The user would also be associated in deciding upon the functional configuration and convinced of the necessity of the change should any be considered necessary.

(c) Step-III (Action by Department of Electronics).

After such a clearance, in principle, the Department of Electronics will obtain competitive sealed tenders from various manufacturers/agents.

(d) Step-IV (Recommendations by Expert Committee).

The Department of Electronics will constitute a Committee of Experts consisting of hardware/software and system specialists, for evaluating the tenders and making a technical recommendation thereon. Specialists from the user organisation will be invited to meetings of this Committee. Prior to initiating the evaluation, the user will be asked by the Department of Electronics to provide the Committee, a ranking of his preferences of computer types, together with his reasons for such a ranking

(e) Step-V (Approval by Approval Committee).

The recomendations of the Committee of Experts will be put up to an Approval Committee consisting of:-

- (i) Chairman Electronics Commission .-- Chairman
- (ii) A Member of the Electronics Commission—Member
- (iii) Secretary. Department of Economic Affairs-Member

In addition, the Secretary of the Department of which the user organisation is a part or is administratively associated, will be co-opted to the Approval Committee, when cases concerning those user organisations are taken up. In case the user department does not agree, the decision of the Approval Committee will be final.

Contracts for the computer finally chosen will be placed by the user organisation concerned.

- (f) For computers imported under the above policy guidelines, clearance from the indigenous angle and other functions, normally discharged by the DGTD, will be handled by the Department of Electronics
- (g) The procedure outlined above will not apply to computers, programmable calculators, mini-computers, etc. entailing an outlay of Rs. 5 lakhs or less c.i.f., in foreign exchange for which existing Government procedures will continue vide letter No. 1/EC/75 dated April 8, 1975 from Secretary Electronics Commission to all Secretaries of the Government of India.

Norr: --

- (i) The functioning of the procedure will be reviewed after a period of two years.
- (ii) The time taken for finalising the specification and evaluating the tenders under the procedure should not exceed three months

Recommendation

The Committee would like Government to go into all aspects of any foreign collaboration proposals which may be received including the reported tie-up between Burroughs and the Tata Consultancy Service. Government should ensure that no foreign company secures a position in the field of computers either on its own or in collaboration where it could dictate its own terms or even remotely pose a potential security risk.

[Sl. No. 104 (Para 7.81) of Appendix XIV to the 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

The proposal for a joint venture between Burroughs of USA and fata Consultancy Services is for the purpose of building-up a highly export-oriented activity in the field of software and computer peripherals. This has been examined in depth by the Department of Electronics to ensure that it has no damaging effects on the local indigenous computer industry. It will in fact support the indigenous industry by suppling sophisticated peripherals if cleared to do so by Government. Government is very conscious of the need to avoid any monopolistic trends in the field of computers as well as the risks involved through such monopolistic trends including these elating to security.

[Department of Electronics No. 275(1)/76-DE dated 15-10-1976]

Recommendation

The Committee have been informed that the Computer Mainten ince Corporation is being set up under the Department of Electronics with headquarters at Hyderabad and branches at Bombay and Delhi. The objectives of the Corporation include inter-alia system ingineering, installation and maintenance of data communication and terminal equipment, planning, coordinating and implementing the national effort on computer and associated equipment mainter-

nance, providing a central re-pository of computer spares, materials

[Sl. No. 105 (Para 7.82) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)]

Action taken

The Board of Management for the Computer Maintenance Corporation has been approved and the building up of the Corporation is now in progress.

[Department of Electronics No. 275(1)/DE-76 dated 25-8-76]

Recommendation

The Committee feel that there has to be a built-in link between the Computer Maintenance Corporation and the Electronics Corporation of India which is the principal public sector undertaking and has already manufactured and put into service about 60 computers.

[Sl. No. 106 (Para 7.83) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)]

Action taken

The General Manager of the ECIL has been nominated as a Director of the Computer Maintenance Corporation (CMC) to ensure a close coordination. Appropriate links between the Computers Maintenance Corporation and the Electronics Corporation of India will be developed when the Computer Maintenance Corporation goes into operation.

[Department of Electronics No. 275(1)/76-DE dated 25-8-76]

Recommendation

The Committee understand that while no difficulties were anticipated in taking over the maintenance of computers from ICL, the talks had not yet reached the conclusive stage in respect of IBM. The Committee would like these matters to be finalised at the earliest, the arrangement should be such as to ensure a smooth transition so that the users can be assured of uninterrupted and efficient maintenance and servicing of the existing computers.

[Sl. No. 108 (Para 7.85) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)]

Action taken

The programmes of IBM and of ICL are coming up for revision under Foreign Exchange Regulations Act. On the basis of such a revision a programme for phased changeover of maintenance responsibilities from these two companies to the Computers Maintenance Corporation will be drawn up by Government.

[Department of Electronics No. 275(1)/76-DE dated 25-8-76]

Recommendation

The Committee urge that the Department of Electronics should work out the requirements of technical personnel to match the manufacuring programme envisaged for the computer industry during the 5th and 6th plan periods. This perspective plan should cover both the immediate and future requirements yearwise so as to provide a fair guide for development of training facilities in the requisite fields. Persons required for innovative leadership in this important technology may be got trained in consultation with the Department of Science and Technology in the Indian Institute of Technology, research institutions and universities. There should also be programmes for training of shop floor personnel in conjunction with the Electronics Corporation of India, Bharat Electronics, Computer Maintenance Corporation etc. It should go without saying that the training programme should be suitably designed and improved continuously in the light of experience.

[Sl. No. 109 (Para 7.86) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)]

Action taken

In order to cope with the manpower problems the following steps are being taken:—

1. Increasing the output at the M. Tech, level in the Hardware and Software Streams

There is already a manpower shortage in the computer R&D area, due to the mismatch between demand and supply. To solve this problem with respect to the two computer projects financed by the Department of Electronics and currently under way at TIFR, Bombay, a scheme has been initiated whereby students sponsored by TIFR (5 for the M. Tech, course and 3 for the D.I.I.T. course) are being trained at IIT, Bombay, the stipend paid to them being borne by TIFR from the project funds. These students are under contract

to serve TIFR after completion of their course work, and are in addition to the regular stream of students otherwise trained by IIT in the normal course. IIT, Bombay has been requested to extend this scheme to a larger number of students to be sponsored directly by the Department of Electronics to work in national projects of interest to the Commission. The various aspects of this scheme, such as drawing up contracts with the students, funding mechanism, etc., are being looked into and as and when the scheme is finalised, the Department will provide the required funds. It is planned that this scheme will be later extended to other IITs if they are agreeable.

2. Tailored courses to cater to specific needs such as that of the Computer Maintenance Corporation.

These would be organised again at IITs and other organisations acquipped to offer such courses, with support from the Department of Electronics. Brief course-outlines for different streams will be drawn up which can then be finalised by the TDC Working Group on Computers. However, this would involve training of a type other than that currently being done by these institutions and to a curriculum specified by the Department. It is proposed to convene a meeting of the concerned heads of departments from these institutions at Delhi, to ensure positive action

3 Advanced Data Processing courses for the Armed Forces

A course outline to provide an alternative to the foreign training that is presently being given to officers of the Armed Forces is being prepared on the lines of such courses currently available abroad. Introduction of such courses at selected centres such as Indian Institute of Management, Ahmedabad. National Institute of Technology and Industrial Engineering, Bombay. Administrative Staff College of India, Hyderabad, the Military College of Telecommunication Engineering Mhow etc. are under consideration. Since these organisations do not have enough trained faculty currently, the first of these courses will involve participation of senior staff from other organisations in the neighbourhood (e.g. Tata Institute of Fundamental Research, Bhabha Atomic Research Centre, Physical Research Laboratory, Electronics Corporation of India Ltd. etc.) for enabling which the Department of Electronics would bring about necessary coordination.

4. Efforts at the National Computer Centres set up with UNDP assistance

The National Computer Centre at Bombay (National Centre for Software Development and Computing Techniques at TIFR), National Informatics Centre at Delhi and Regional Computer Centre Calcutta, will offer several specialised courses, meeting the needs for specifically skilled hardware and software personnel

5. Efforts towards practical training

The Department provides support to the Centre for Electronics Design Technology at the Indian Institute of Science, Bangalore. Similarly, the Department continues to provide technical support for the functioning of the Advanced Training Institute for Electronics and Process Instrumentation at Hyderabad. The Department will ne funding at Bharat Electronics Limited a production oriented training centre which will provide on the job training relating to organisation, management engineering and manufacture of professional equipments and products. Proposals for launching similar programmes in other large public sector undertakings are under ective consideration of the Department. A programme manpower in the field of microwave technoloby has been initiated at IIT. Della by the Department of Electronics through the aegis of the Technology Development Council. It is encouraging to note that recently a number of consultancy units have been set up in scademic institutions such as Indian Institutes of Technology. This would enable academic institutions to be conscious of the problems facing the industry.

The specific responsibility for the field of computers and electronic Data P. ocessing equipment has been assigned to Department of Electronics under Allocation of Business Rules. In the matter of training of personnel the Department of Electronics works closely with Ministry of Education (University Grants Commission Countil of HTs. All India Council of Technical Education etc.) at higher levels and with the ITIs and a large number of public sector undertakings for training of shop floor personnel in manufacturing techniques etc.

[Department of Electronics No. 275(1)/76-DE dated 15-10-76]

Recommendation

Now that the country is going forward with a sizeable programme for computer manufature, every effort should be made to publicise the new opportunities of work, so that some at least of the talented Indians working a road could be attracted back to patriotically-motivated employment at home. Government should also consider ways and means of attracting those who are highly skilled in the field to come at least for a specified duration and to assist in the research and development effort in the critical areas of peripherals, software etc.

[Sl. No. 110 (Para 7.87) of Appendix XIV to the 221st Report of the P.A.C. (Fifth Lok Sabha)]

Action taken

The Department, as a result of a large number of discussions/ field investigations, is now looking at an important aspect of this problem i.e. creation of an environment in which horizontal mobility of scientists, technologists and industrial engineers can be ensured on an acceptable basis which would result into improvement in the interaction between the industrial and the academic sectors. The horizontal mobility problem when solved in respect of Indigenous talent would broadly apply to the problem of utilisatiobn in India of the services of talented Indian electronics experts from abroad. In this case the aim is to get back well-qualified, experienced and talented Indians from abroad, who could serve as nucleating points for the growth of the areas which are critical to the overall development of electronics in the country. Past experience shown that, while a large number of Indian scientists and engineers have returned to the country, there have been problems in respect of return of high level Indian scientists and engineers for long-term assignments or permanent employment in India. Such high level scientists/engineers, however, are willing to come to India for shortterm, well-defined, result-oriented assignments. Top management in India organisations also feel that this approach would enable both employers and employees to use the short-term assignments explore possibilities for long-term employment/permanent absorption. In an attempt to solve the problems outlined above, the Department is now considering a fellowship scheme. Under this scheme the Department will provide suitbale fellowships to industrial organisations/institutions which could arrange for the services of Indian scientists/engineers working in electronics and its inter-disciplinary fields both in India and abroad for a specified period of time for solving well-defined time bound assignments. The parent department/organisation of the scientists/engineer being seconded, when he is working on such assignments, will have to undertake to make

available his services while at the same time providing an assurance that they will take him back at the end of his assignment and also undertake to safeguard his seniority in his service and promotion prospects in his permanent cadre. This scheme is being implemented through the TDC and its Working Groups.

[Department of Electronics No. 275(1)/76DE, dated 15-10-1976]

CHAPTER III

Recommendations/observations which the Committee do not desire to pursue in the light of the replies of Government

Recommendation

It would appear that at least in the initial stages, computers had been promoted by the companies essentially as business machines and efficiency-improving office-equipment and that in the selection of applications for computerisation and in the choice of a particular system or onfiguration, there had not been any positive understanding of the objectives sought to be achieved by computerisation or a evaluation of how far a particular system or configuration would subserve the objectives envisaged. For instance, the Director of the Central Bureau of Investigation has deposed before the Committee that at the time of hiring the equipment, it could not be anticipated whether all the machines would be required. This is indicative of grave deficiency in working out the requirements.

[Sl. No. 5 (Para 2.45) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action taken

Ministry of Home Affairs have stated that the idea of mechanisation of crime records was not sold to the Central Bureau of Investigation by any manufacturer or supplier of such items. A proposal for the hiring of data processing machines consisting of: Punching Machine: Verifier: Interpreter; Sorter and the Alphabetical Accounting machine, was initiated in 1965 by the Central Bureau of Investigation. Each of these five machines had a different function perform and these together comprised a single uniti only one set of which was hired in 1968. This was the minimum requirement needed for the mechanisation of records. Later, scientific feasibility study was got conducted in 1969 through the Computer Centre of Department of Statistics to assess the needs for computerisation by the CBI. Following the acceptance of this Study Report by the Ministry of Home Affairs, the Computer Centre offered its services to the Central Bureau of Investigation in July 1970. Consequent to this development, only 2 items viz: The PunchingMachine and the Verifier were retained and the remainder were dehired from June

1970. Sine then the Central Bureait of Investigation is continuing with only one item of Punching Machine and one Verifer which are minimum foundational equipment needed for availing of computer facilities. It would thus appear that the minimum required equipment was hired in 1968 and consequent to the switch-over from the mechanical to the computer system, the minimum components viz. One Punching Machine and one Verifier were retained. There was therefore, no deficiency in working out the requirements either at the stage of the mechanisation or at the stage of the computerisation

This aspect of setting down of objectives for any Computerisation programme would be overcome consequent to the revised procedure under which a detailed statement of case on the basis of a systems analysis is to be provided by every user in Government whintends to acquire computer facilities to the Department of Electronics. Clearances for installation would be given on the basis of identified workloads and the relevance of the applications to the anticipated improvements to the system and benefits envisaged.

[Department of Electronics No. 275(1) 76-DE, dated 25-8-1976]

Recommendation

The Committee are unable to appreciate why the responsibility for scrutinising requests for computers could not be entrusted to the Department of Electronics some years earlier as this Department had come into being in 1971. Moreover the Department of Electronics had already been entrusted with the responsibility for scrutinising the applications for import of computers into the country and this could have easily been extended to cover scrutiny of requirements for purchase hire of computers by Government department/Public undertakings from the multi-nationals functioning in the country. Had this been done there would perhaps have been a truly knowledgeable and critical scrutiny to ensure that the computers were purchased only where indispensably required in the larger public interest and also on the most competitive rates.

[Sl. No. 12 (Para 2.52) of Appendix XIV to the 221st Report of the P.A.C. (Fifth Lek Sabha)]

Action taken

The Electronics Commission which came into being in 1971 was entrusted with the overall responsibility for implementation of the national computer policy and programmes. The Department of Electronics immediately set up a machinery to regulate the import

of computers since these were considered to be strategic, high value items. The Department took a decision in 1972 that all further import of computers would be on the terms of outright purchase only. Imports are permitted only on the basis of scrutiny of clearly spell out user requirements by the Department of Electronics and also final concurrence of the Department on the choice of the system to meet these requirements on the basis of an evaluation of tenders received from a variety of computer manufacturers.

The responsibility for scrutinising the requirements of computers and data processing machines to be installed by Government departments (which was one detailed element in the overall computer policy) continued to vest with the Department of Statistics. Where the requirements could be met through systems available locally on payments made in rupees; including these supplied by the multinationals through their programmes in India, the clearance were given by that Department; and only in respect of requirements that could not be met indigenously was the matter referred to the Department of Electronics.

The total responsibility in respect of all systems, whether obtainable indigenously or through import in the case of all Government Departments was transferred to the Department of Electronics August 1975. During the years 1971 to 1975, computer systems were available from within the country through manufacturing programmes of Electronics Corporation of India Ltd., the programmes International Computers Indian Manufacture (ICIM) Ltd. for the 1901A computer system (with Bharat Electronics Limited functioning as a sub-contractor for the central processing unit), and the IBM 'AS IS' programmes for IBM 1401 computers and UR Machines. One of the first decisions taken in 1972 by the Electronics Commission was to terminate the 'AS IS' manufacturing programmes (of both IBM and I(L). The IBM 1401A programme was terminated when the last of the systems was delivered to the customer in April, 1972. The 'AS IS' programme of IBM and ICL for unit record machine have also been phased out over the years and have finally concluded during 1975. During the intervening period before the Department of Electronics was made totally responsible for regulating introduction of data processing equipment in Government new investments Computers and Data Processing machines in Government have not been significant

[Department of Electronics No. 275(1)/76-DE, dated 23-10-19761

Recommendation

Another significant lacuna noticed by the Committee is that whereas under the General Financial Rules, the Ministries are expected to route their purchases through DGS&D, they do not, in cases of hiring, have to go through that filtering process. Several Departments of the Government were seen to have hired computers/data processing equipment by direct negotiations with the suppliers. This happened inspite of the view of the Secretary of the Department of Supply that hiring was inter-linked with the economics of purchases and it was desirable to entrust both these activities to DGS&D.

[Sl. No. 18 (para 3.92) of Appendix XIV to 221st Report of the PAC (Fifth Lok Sahba)]

Action taken

The question has been examined, and it is felt that the hiring of computers or other electronic gadgets need not be done through the DGS&D. While the Supply Department is the Central Purchasing Organisation for the Government of India, hiring of any item whatever has not been included in the functions of the Department of Supply. The hiring of a highly supplisticated piece of equipment like a computer will call for a full understanding of its technical and cost aspects, and the Department of Electronics will be in a better position to assess these aspects; this is particularly so considering that the Department of Electronics has been assigned full reponsibility in the area of drawing up specifications tendering for and evaluate of all imported computer systems and has build-up the expertise for these purposes. The Department of Electronics will advise User Departments on the basis and terms of such hire if services of data preparing equipments costing more than Rs. 5 lakhs are to be obtained on the basis of hire in preference to outright purchase.

[Department of Electronics No. 275(1)/76-DE dated 23-10-1976]

Recommendation

This concern has been accentuated by the fact that there appears to have been no coordinated thinking from the security angle, on the part of the agency of Government dealing with security, namely, the Ministry of Home Affairs. The Home Secretary had simply stated that each Department was supposed to take necessary measures from the security aspect. This is a rather airy observation, least expected from the Home Ministry. The Committee are of the view that the Ministry of Home Affairs should have taken continuous interest all these years in this vital matter and should have been in

a position firmly to reassure the Committee that data in our sensitive departments at least were being regorously and fully safeguarded.

[Sl. No. 44 (Para 5.39) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha).]

Action taken

It is true that there are no specific instructions issued by the Ministry of Home Affairs on data security in the case of computers installed in various Government Ministries and Departments. However, the Departmental Security instructions issued by the Ministry of Home Affairs 'mutatis mutandis' apply to classified information stored in computers. The Departmental Security instructions, interelia, cover subjects like 'treatment, custody and movement of classified documents,' 'physical security measures', 'personnel security measures' and 'supervision of security measures'. It has been enjoined in these instructions that the Secretary of each Ministry or the Head of each Department is responsible for security in his office.

It has also been laid down in these instructions that the Intelligence Bureau will act in an advisory capacity and provide an officer to inspect the security arrangements in all Government Departments and Ministries and give the necessary instructions to the Departmental Security Officers. In accordance with these instructions, the IB have already conducted inspection of the computer section of the Joint Cipher Bureau in October, 1975 and a programme of inspection of computer sections in the various Departments and Ministries is being drawn up.

It may be appreciated in this context, that the type of data security envisaged by the Public Accounts Committee involving developing and installing in the computers, hardware and software keys to obviate chances of leakage of data to unauthorised persons, is a highly technical matter, beyond the competence of the Home Ministry, and would rightly fall within the domain of the Department of Electronics which is now taking the necessary measures.

[Department of Electronics No. 275(1)/76-DE, dated 15th October, 1976]

Recommendations

In their 127th Report (5th Lok Sabha) on the Railways, the Committee had pointed out that there was serious difference in the prices shown by IBM for customs in import documents and those claimed by them from Railway administration. The Committee called for

information about the purchase price paid by Government Departments on items imported by IBM and ICL and the actual value of these articles declared to customs at the time of importation by the suppliers. They regret to observe that the Central Board of Excise and Customs have not been able to furnish the information to the Committee. Certain excuses for this failure have been conveyed to the Committee, but they are by no means satisfactory. In view of the apparently huge margin between the cost as shown in declarations to the Customs authorities and the cost as charged from users including Government Departments, it is strange that Government could not collect the relevant information required by the Committee On their own admission, the Central Board of Excise and Customs had been aware of the fact that "the IBM having relationship with their foreign associates were in a better position to import such 'AS IS' machines by under-invoicing them and charge high margin of profit by selling those machines in India." In spite of it, unfortunately, the customs authorities had not stirred themselves to action in earlier years. If the differentials between the prices charged to the users and the prices shown in the customs document by IBM. as a the case of Railways is any indication IBM must have defrauded our customs revenue on a huge scale.

[Sl No 63 (Para 6.161) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha).]

Action taken

The actual import value of data processing machines was called for by the Department of Expenditure but the same could not be collected by the Custom Houses for want of relevant details such as names of importers, description. Bill of Entry No, or the ships names and rotation numbers

The Department was aware of the possibility of under invoicing by M/s IBM and action was taken during these years to check such mal-practices. As early as in 1956, it was decided to base the assessment on rental value instead of invoice value. Subsequently however, it appeared that the assessment on rental value was not practicable. Therefore, the basis of assessment was changed and adopted. In 1969 even the 'As Is' were valuation Rules 1963 machines were being loaded by 140 per cent of the invoice value. Further as explained in the Action taken Note on the Committee's recommendation in para 1.104 of their 127th Report the method of invoicing adopted by M/s IBM was again reviewed and in December 1974, it was decided that the assessable value of these machines should be determined after loading the inter-company billing price

by 350 per cent under Rule 8 of the Customs Valuation Rules. Besides, actuals of charges like freight, insurance and other expenses shown in the invoices are also added. The value of imports of spares and accessories was also determined in the similar manner.

It may be mentioned that M/s IBM have also been importing such 'As Is' machines which have lived their life and exhausted their utility and were meant for scrapping. These machines were imported for salvaging serviceable parts for subsequent use in the manufacture of new data processing machines for which they have a manufacturing programme. However, no instance of 'As Is' machines being sold in the same condition has come to the notice of Bombay Custom House. Further, the data processing machines imported by IBM against licences issued to various Government Departments and then sold to these Departments were brand new and not 'As Is' machines.

[Department of Revenue and Banking F. No. 512'8'76-Cus-VI.]

Recommendations

6.162. A summary recapitulation will give some idea of this defrauding process. From 1st May, 1962 to 25th August, 1973, imports made by IBM had to be assessed to customs duty on the basis of inter-Company Billing Prices plus 73 per cent and actuals of the freight, insurance and other charges. From 25th August, 1973. it was found necessary to increase the loading to 350 per cent in respect of capital goods machinery and equipment etc. imported by IBM and for data processing equipment loading was decided on case to case basis. The position being disconcerting, the Committee wanted to know the exact position and the rationale of this imposition which was no doubt necessary to foil IBM's sharp practice. The Committee regret that things appear to be done in Customs on an . ad hoc basis and there is no consistent principle behind assessment of customs duty on the import of "AS IS" machines. Between 1956 to 1962 the customs duty was related to the rentals charged by the Company. Later on, certain other additions were made on account of the value of remittances made by the Company of their foreign profits and it was fixed at 73 per cent. After a subsequent review the Department came to the conclusion that higher custom duty should be charged but a final decision was taken only in December 1974 that is perhaps after the Committee's Report on the Railways was presented to Parliament. Our Customs administration should be run on a more principled foundation and all efforts in that direction must be made forthwith.

6.163. The Committee disapprove of the casual manner in which this question of customs duty was dealt with by the Customs authorities, particularly, in the earlier years. It is more surprising that although Customs Rules permitted fixation of prices for assessment of customs duty on the basis of the domestic selling price in the tountry of origin, Government did not resort to this rule till presumably the Audit/Committee pointed out the apparent anomaly in the prices declared to the customs authorities and charged to the Railways etc.

[Sl. No. 64 and 65 (Para Nos. 6.162 and 6.163) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha].

Action taken

As these recommendations are complementary, a consolidated Action-taken-note is being sent to the Public Accounts Committee.

A detailed note indicating the rationale behind reviewing procedure for valuation of imports made by M/s. I.B.M. from time to time by the Bombay Custom House is annexed. It may kindly be observed that the decisions of the Custom House in this regard were based on the evidence available during these reviews and the results of investigation carried out by them.

It may also be mentioned that the present decision of the Bombay Custom House was not influenced by the Committee's report on Railways. The present decision has in fact been influenced by the following two factors:—

- (i) The data processing machines were being imported by other independent buyers in India from IBM, U.S.A. and prices charged to them were found to be based on the List prices of I.B.M., which was based on the list price of I.B.M., U.S.A., which was in conformity with the provisions of Section 14(1)(a) of the Customs Act, 1962 or rule 3(a) of the Customs Valuation Rules. 1963.
- (ii) That such machines, in respect of other countries were being sold or offered for sale by I.B.M. associates, in the country of manufacture. The offer for sale being in the nature of price list, which their respective locations maintained and this constituted evidence of value under rule 3(d) of the Customs Valuation Rules, 1963.

As regards assessment of imports of 'AS IS' machines, it may be mentioned that initially these were being assessed by loading the

I.C.B.P. by 73 per cent or 83 per cent as the case may be, less depreciation according to the number of years these had been in use abroad prior to the import but subsequently it was decided to load I.C.B.P. by 140 per cent for assessment purpose plus the charges for packing freight, insurance etc. This decision was taken by the Government of India in 1969 on a revision application filed by the party. In December, 1974, after detailed investigation, decision regarding further loading of I.C.B.P. was taken. The factors influencing this decision have been explained above.

[Department of Revenue and Banking F. No. 512/S/76-Cus-V1.]

ANNEXURE

Note referred to in the Action Taken note on the recommendation Nos. 6.162 and 6.163 of the Public Accounts Committee in their 221st Report.

M/s. IBM World Trade Corporation. Bombay is a branch of the firm of the same name incorporated in the U.S.A. as head office. The Head office operates as an export organization of M/s. International Business Machines Corporation a company also registered in the U.S.A. IBM are manufacturers of electronic and electrical accounting, statistical, computing time recording and indicating equipment. Prior to 1956, these machines were let on hire to customers on payment of fixed monthly rental. The machines were supplied by the Head Office to its overseas branches or subsidiaries from any one of the factories situated in U.S.A. Canada France. Germany Italy. Scotland, Netherlands and Brazil. The prices to be charged by the supplying factories were fixed by the parent firm and they were known as 'Inter company billing prices.' These prices varied from factory to factory depending upon the actual cost of production of the machine. Payment for the goods was made by the importing branch direct to the supplying factory and it was always for the invoice value only. The monthly rental attached to the machine was fixed by the parent firm and unlike the billing prices it was uniformly the same for the same type of machine imported from different factories.

2. The estimated average carning life of all models of IBM machines was 80 months. The total rental yielded by machines of different type during their active life was from 2½ to 8 times the invoiced F.O.B. value. It was ascertained that after deducting from the gross earnings the reasonable post importation expenses and profit of the importing branch a substantial balance was left over for being remitted to the Head Office.

- 3. In view of the circumstances in which the machines were imported and the fact that there was deferred payment of Supplier's profit it was decided by the Assistant Collector of Customs, Special Investigation Branch, Bombay vide his circular No. 299, dated 27th February, 1956, that all IBM machines should be assessed on the deduced price equal to total rental of 80 months active life less the post importation expenses and profits of (about 60 per cent) in the aggregate. The monthly rental was to be ascertained from the Hiring Agreement.'
- 4. The matter was again reviewed in November, 1960, when it was tentatively decided to assess IBM's imports on the basis of the purchase price indicated in the sales manual. This decision was confirmed on 26th April, 1962, by the Additional Collector of Customs. It was also decided then that the spare-parts of the equipment would be assessed to duty after including the invoice value by the percentage which represented the difference between the purchase price and the Inter Company Billing price of the machines for which the spares were imported. This decision was incorporated in the SVB Circular No. 1341, dated 7th May, 1961.
- 5. M/s. IBM appealed to the Board against the above decision. The Board was of the view that the price invoiced to the appellant on the basis of the inter-company billing price was not the price available to any independent buyer and, therefore, did not represent the value for the purpose of Customs duty. The appellants after having outlined the method adopted in Australia. Canada and U.K. urged that the value for purposes of customs duty on the IBM goods imported by the appellants be determined on inter-company billing price plus 30 per cent. The Board was informed that there existed a licence agreement between the U.S.A. principals and the U.K. Branch according to which the I.B.M. goods supplied to U.K. branch, were subject to a maximum service charged of 30 per cent on prime The Board was further informed that the inter company billing prices from May, 1962, onwards represented prime cost plus 20 per cent service charges and that in addition to the invoice price, Australia. Canada and U.K. pay their parent company in New York royalty of 10 per cent of revenue derived from selling and renting the data processing equipment. The Board held the view that if there had been no IBM firm in India and the goods were to be imported by an independent trader, such trader would have been charged a price which would have been more than the prime cost at least by a minimum addition of service charges of 30 per cent and by the profits to the extent of that represented by the above mentioned royalty and such a price then would have been the minimum price at which the

India. Accordingly, Board held that the invoice price on the basis of inter-company billing price had in the first instance to be loaded by say 8 per cent to bring it to the level to which it would have been charged to an independent trader. Further, more, upon consideration of the evidence on record the Board held that the element of deferred profits on import of IBM goods by the appellants could be fairly estimated at about 65 per cent of the inter-company billing price. Accordingly, the Board directed that the assessable value of the data processing machines and spares thereof imported by the appellants from their associates abroad should be determined on the basis of the inter-company billing price plus 73 per cent (Appeal Order No. 45 of 1964, dated 23rd March, 1964).

- 6. On the basis of the above appellate decision, the Bombay Custom House's Circular No. 1341. dated 7th May. 1962, was modified to the extent that the assessable value of the firms import of data processing machines and spares thereof by IBM from their Principals and Associates abroad, after 1st May. 1962, should be determined on the basis of the inter-company billing price plus 73 per cent and in respect of imports made before 1st May. 1962, the assessable value should be determined on the basis of inter-company billing price plus 83 per cent. It was also indicated that the decision in terms of the new Act, i.e., for imports after 1st February. 1963, will follow.
- 7. The matter was again reviewed in the light of Section 14 of the Customs Act. 1962 and the Customs Valuation Rules, 1963. These instructions (which were on the above lines) were incorporated in SVB's Circular No. 2358, dated 3rd February, 1965. The reasoning adopted in the said circular was as follows:

The firm had produced the Auditor's Certificate from which it was seen that the basis of invoicing to them by the USA principals and their subsidiaries in Europe (excluding Italy) Canada. South America, Japan and Australia has continued to remain the same as was obtaining prior to 1st February, 1963. In other words, the intercompany billing prices charged by the I.B.M.. USA and their associates to the I.B.M.. India were based on the manufacturing cost plus a mark up 20 per cent (Twenty per cent). In the case of supplies from Italy the mark up was however 10 per cent (Ten per cent) instead of the normal 20 per cent.

8. The firm had stated that in respect of supplies made by IBM, USA to their subsidiaries in the U.K., the mark up over the manufacturing cost was 30 per cent. In view of the mark up in respect

- of imports by I.B.M. India being 20 per cent only, the inter-billing prices needed to be loaded by 8 per cent in the first instance so as to equate the prices to the normal inter-billing price from I.B.M., USA to I.B.M., U.K. Also, it was seen that the mark up to the manufacturing cost was purely on account of servicing charges. There was accordingly no element of profit included in the inter-billing prices charged by IBM. USA or their subsidiaries to the IBM, India which any manufacturer would include while invoicing the goods to independent and unconnected importers. The inter-billing prices were not thus acceptable for purpose of assessment under Section 14 of Customs Act. 1962.
 - 9. The IBM India remitted to their principals by way of rentals (on the rented machines) and in the shape of profits. These remittances were obviously profits to the suppliers and were in the nature of deferred payments. The profit element was estimated at 65 per cent under Rule 8 of the Customs Valuation Rules 1963 in the best judgement of the Customs House. In other words, the inter-billing prices was required to be loaded by (65 per cent plus 8 per cent)=73 per cent in the case of supplies from all countries other than Italy and by (65 per cent plus 8 per cent plus 10 per cent)=83 per cent in the case of supplies from Italy.
 - 10. The matter was again reveiwed in 1969 when it was found that as a result of change in the practice of machine billing introduced by the firm's Italy Associates, w.e.f. 1st April 1966, the rate of service charges on shipment of IBM Data processing machines from Italy was increased from 10 per cent to 20 per cent. (i) It was, therefore, decided to reduce the previous loading fixed for the data processing machines supplied by the Italian Associates of the firm from 83 per cent to 73 per cent. The revised rate of loading was to be applied only to the future imports of such machines by the firm. vide SVB Circular No. 3463, dated 1st November, 1969. (ii) As regards the supplies of spare-parts by Italian associates, such items continued to be assessed in accordance with the earlier decision.
 - as the firm had not submitted the required information by way of Auditor's Certificate etc. It was decided by the Custom House to assess the imports of data processing machines components and spare parts of such machines and equipments for stock and sale from their USA principals and associates abroad provisionally under Section 18(1) of the Customs Act, 1962. The Circular, dated 25th August. 1973. also mentioned that the value of provisional duty assessments may be arrived at on the basis of invoice value plus 73 per cent plus

actuals of freight, insurance and other charges if any, and extra deposit of 20 per cent of the duty so assessed, as per P.D. assessment rules.

- 12. The last review of all the decision was taken by the Custom House in respect of imports of Data processing machines and spares thereof and other imports in 1973-74. The decision taken were based on the information, evidence etc. made available by M/s. I.B.M. and scrutiny by the Custom House.
- 13. In the review of 1973-74, it was seen from the data submitted in respect of data processing machines that the average difference for 1972 and 1973 between ICBP and parent organisations selling price was about 350 per cent. (Incidentally, it may be mentioned that the figure of 375 per cent indicated initially in the Circular of the Assistant Collector, dated 17th December, 1974, was corrected to 350 per cent by a corrigendum Circular dated 24th December, 1974). It was, therefore, decided as per SVB Circular No. 4356, dated 17th December, 1974, that the assessable value of these goods should be determined after loading the invoice ICBP by 350 per cent for assessment purposes under Rule 8 of the Valuation Rules, 1963. The value of imports of spares and accessories was also to be determined in the similar manner after 350 per cent loading.
- 14. The importers had preferred an Appeal to the Appellate Collector of Customs, Bombay, against the decision as per S.V.B. Circular No. 4356, dated 17th December, 1974. By an Order dated 9th July, 1976 (issued on 3rd August, 1976) the Appellate Collector of Customs, Bombay had rejected the appeal filed by the importer upholding the decision of the Assistant Collector of Customs for Special Valuation Branch. The importers have now filed a revision application before Joint Secretary (R.A.) on 16th August, 1976, against the order in appeal issued by the Appellate Collector. The party had also gone to the High Court. According to the Court's decision vide consent terms, the imports of the firm were again being assessed provisionally pending decision in appeal/Revision as per Assistant Collector's decision on 25th August, 1973. The matter is, therefore sub-judice pending decision in Revision

Recommendation

The picture that emerges about the performance of IBM on the income-tax front is also very discouraging. The Committee had asked whether any default under the Income-tax Act, viz., in the filling of returns, payment of advance tax, deduction of tax at source and perquisites given to officers and employees etc., had come to notice in

respect of the company. The Ministry replied that no default on the part of the company in respect of filing of returns, payment of advance tax etc., "has come to the notice of the Department so far". This almost sounds an evasive answer, and the Committee would require specifically the details for all the years for which IBM filed the returns, the dates on which such returns were received, the date of payment of advance tax, the total tax deducted at source and paid to Government's account. That the Department has been lax in this case is evident from the fact that the payments made by the Government Departments and other agencies were not subjected to deduction of tax at source under section 195 of the Income-tax Act till 1970. Even after March 1970, the company had managed to get a certificate under Section 195(3) from the Income Tax Officer and it has not been vouchsafed to the Committee, whether they had fulfilled all the conditions mentioned in Rule 29(b) of the Income-tax Rules.

[Sl. No. 73 (Para No. 6.171) of Appendix XIV to 221st Report of the PAC (Fifth Lok Sabha)

Action taken

A statement showing the dates on which returns were received, the dates of payment of advance tax, tax deduction at source and paid to the Government account for the assessment years 1952-53 to 1975-76 is enclosed (Annexure)

2 As regards the issue of certificate under section 195(3) by the Income-tax Officer, it is reported that IBM had fulfilled all the conditions mentioned in Rule 29(b) of the Income-tax Rules, 1932.

[Department of Revenue and Banking F. No. 241/36/76-A and of the PAC (Fifth Lok Sabha)].

Asst. Year		Da4a	Date of payment of advance-tax					_	
	Date on which return was due		Date on which return was received	est instalment	and instalment	3rd instalment	Total tax deducted at source and paid to Govt's a/c.	Remarks.	
1	• Frank was	2	3	4		6	7	8	
1952-53	•	30-R-52	18-7-53	Nil.	Nil	Nil	Nit	Loss assessed. Extension to file r granted.	eturn
1953-54	•	30-6-58	8-2-54	• •	4.	19	,•	"	
1954-55	•	28-7-54	20-9-54	••	•	••	••	**	
1955-56		30-6-55	15-12-55	••	**	••	••	•	
1956-57	•	26-6-56	28-9-56	,	,	•	**	Total income has been reduced to Nil due to	
1957-58	•	30-6-57	16-10-5	7	•	3 ;	"	set off of earlier loss.	
1958-59	•	30-6-58	7-11-50	27	9.	,,	37	Extension granted upto 15-9-58	
1959-60	•	30-6-59	28-12-59) , ,	; ∮	••	••	., 10-12-59	
1960-61	•	30 -6-6 0	4-2-61	**	»	99	P :	Extension sought. Total income has reduced to nil due to set off of earlier le	
1961-62	•	30-6-61	18-12-6	·	••	**	••	19	
1962-63	•	30-6-62	20- 9- 6:	2	••	••	.,	**	

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1963-64	•	37-5-63	30-9-63 19-3-64 Revised)	•••	••
tgh4-h5	•	y at dig	30 -9-6 4	••	••
1965-44	•	აა-ჩ-ჩვ	17-2-66	••	
1966-67	•	7-7-1H	14-12-(1)	4.4	••
19 67- 68	•	30+β-67	5-12-67	28-2-kim	3-3-6 8-3-67 21-3-97
1 968- 69	٠	30-6-67	16-11-68	2-6-67	5-9-17
1969-70	•	9-6-69	14-10-69	1-6-63	2-9-68
1970-71	•	კი-6-7 0	3-10-70	115-15-154	16-9-64
1971-72	•	30-6-71	14-10-71	18-6-70 & 18-6-70	16-9-70 16-12-70 & 16-12-70
1972-73	•	30-6-72	2-8-72	15-6-71	10)-71
1973-74	. •	15-3-73	14-8-73	:6-6-72	171-3-72
1974-75	•	30-6-71	27-6-74	18-6-63 & 18-6-73	111-9-73
1975-76	1	30-6-75	23-6-75	19-5-71	0.9-74

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	63.64	Income reduced to NIL	
.,	••	Extension granted upto 30-9-64. Assessed at Nil, as c/fd. loss has been set off.	
•	••	Extension granted upto 19-2-66.	
	••	Extension sought upto 15-12-66. Self-assessment tax paid Rs. 39,50,399.	
-	Nit.	(i) Time granted upto 15-10-67. Further request for extension of time upto 30-11-67 No order. (ii) Adv. tax noticed issued on 15-2-67.	
4-12-67 &	**	Extension granted upto 15-11-68.	
2-12-63 &	[15,379	Extension granted upto 15-10-69.	151
10-3-69 17-12-69	2,64,680	Extension granted upto 30-9-70.	1
19-1-71 1 9- 1-71	18,662	Extension granted upto 15-10-71	
11-12-71 X	17.377	Extension granted upto 31-7-72.	
17-1-72 19-12-72	4.212	Extension granted upto 15-8-73.	
22-12-73 & 17-1-71	3,600	₩	÷
10-14-74	1,000	• •	

Recommendation

The Committee are unable to appreciate the technical stand taken by the Income-tax Department in the matter of allowing the depreciation for calculation of taxable income. It is common knowledge that a large number of machines having no book value are in circulation and are earning exorbitant rentals for IBM and ICL. The Income-tax authorities, however, stood by the letter of the law and merely followed the criteria of "original cost of any plant or cost at the time of installation and calculated the depreciation according to the prescribed rates" without following any independent check with reference to the entries in the books of the company. It is common knowledge that IBM recovered depreciation on its machines hired out on a 4 years life basis but actually the machines last much longer But the Income-tax authorities again seem to take a very legalistic stand adopting a certain prescribed formula "irrespective of the amount of depreciation charged in the books of the company". Since the life of the machine is admittedly much longer than the fourvear period taken by IBM it is evident that the company may have been making excess claim on the ground of depreciation in order to reduce their taxable profits. The Committee would urge Government to go into the matter in all its aspects and re-examine Suitable instructions should also be issued to provide clear guidetines to the field officers.

IS. No. 78 (Para 6.17. of Appendix XIV to 221st Report of PAC (Fifth Lok Sabbat).

Action taken

With due respect, it is submitted that depreciation is allowed on various business assets at the prescribed rates under the Income-tax. Rules, 1962, irrespective of the amount of depreciation charged by the assessee in his books. The amount charged in the books do not affect the depreciation allowable under the provisions of Law, and, therefore, does not reduce the taxable profits.

[Department of Revenue Banking F. No. 241:40:76-A & PAC-I dated the 2nd August 1976].

Recommendation

According to information furnished to the Committee. IBM had so far remitted over Rs. 3 crores by way of profits during the period 1961 to 1971. The representative of the Department of Economic Affairs had during the course of his evidence before the Committee admitted that Government were all along aware of the fact that there was need to do something regarding repatriation of profits, but Government did not want to impose restrictions on remittance of profits and had instead, adopted the course of requiring foreign companies

to reduce their equity-holdings to 40 per cent. The Committee note that Government have been keeping under review the question of large remittances of profits by foreign companies and multinationals. The Committee stress that every effort should be made to see that this largely avoidable strain on our foreign exchange position is minimised by a truly meaningful streamlining of the entire issue.

[Sl. No. 79 (Para 6.177) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action taken

The guidelines for the administration of Section 29 of the Foreign Exchange Regulation Act, 1973 take into account various activities of the foreign companies and provide for varying levels of equity. For priority fields involving Appendix I industries, or sophisticated technology or exports a level of foreign equity not exceeding 51 per cent. or 74 cer cent. depending upon the criteria applied is permitted; for nonpriority fields like trading etc. the foreign equity is restricted to 40 per cent. The operations of the companies in terms of the guidelines would ensure that the foreign exchange remittance arising out of their operation would be commensurate with the benefit which accrues to country's economy.

[Department of Electronics No. 275 (1) [75-DE (Para 6.177) dated 22nd January, 1977]

Recommendation

The Committee note in this context that while the Electronics Corporation of India Ltd. is working under the administrative control of the Department of Atomic Energy, the Computer Mainterance Corporation would be working under the Department of 1 octionics In this context, the Committee would like to draw a tention to the recommendations made earlier by the Estimates Committee in their 66th Report (Fifth Lok Sabha) and reiterated by them in their 95th Report (October, 1975) that Government should consider the question of transferring the administrative control over the Electronics Corporation of India Limited from the Department of Atomic Energy to the Department of Electronics. The matter is understood to be still under the consideration of Government. The Government fee! that if both these Corporations (Computer Maintenance and Electronics Corporation) are brought under the administrative control of the Department of Electronics, it should be posssible to foster an integral liulsage from the very inception. This would be in the interest of avoiding overlap and ensuring proper distribution of duties and responsibilities.

[Sl. No. 107 (Para 7.84) of Appendix XIV to the 221st Report of PAC (Fifth Lok Sabha)].

Action taken

While activities related to Computers account for about 20 per cent of the activities in Electronics Corporation of India Limited. (ECIL), the Corporation's contribution to the programmes of the Department of Atomic Energy (DAE) also account for a similar proportion. In addition, a further 30 per cent of ECIL's activities, which relate to needs of other departments are carried out in association with Department of Atomic Energy. A major reason for the innovative success of Electronics Corporation of India Limited, is the smooth interaction at operational levels, between Electronics Corporation of India Limited and Department of Atomic Energy, which has been possible because Electronics Corporation of India Limited is under the administrative control of Department of Atomic Energy. The present international attitudes towards cooperation in the utilisation of nuclear energy make the attainment of se'f-reliance nuclear engineering an urgent task. Electronics Corporation of India Limited, as a major reservoir of nuclear electronics expertise has an essential part in the task of developing self-sufficiency in the nuclear programme which would be delayed if the integral relationship between Department of Atomic Energy and Electronics Corporation of India Limited is altered now.

Moreover, Electronics Corporation of Ind.a Limited provides a classic example of transfer technology without any measure of foreign colloboration. This has been primarily due to the intergal linkage between Department of Atomic Energy and Electronics Corporation of India Limited and continuing utilisation of spin-off activities from the strong and competent Electronics Groups in Bhabha Atomic Research Centre. Tata Institute of Fundamental Research and other units of Department of Atomic Energy family. The innovative chain of technological development in the fast changing field of electronics coverning the various facts of suphisticated electronic instrumentation was forged more than two decades ago under the farsighted leadership of Dr. Bhabha Since then the constant interaction between Rewarch and Development units of Department of Atomic Energy and Electronics Corporation of India Limited has led to an effective and wasy flow of technology which is difficult to achieve under any other system. In developing equipment and components for critical inputs in large contracts with Defence, Railways and Post and Telegraph, inter-disciplinary teams of Bhabha Atomic Research Centre and Electronics Corporation of India Limited have achieved remarkable results primarily because of the constant exchange of ideas between Research and Development and production units at various stages of design, prototype development and manufacture of electronics equipment and component.

The Department of Atomic Energy has expressed the views that there are considerable advantages in Electronics Corporation of India Limited continuing under the administrative control of Department of Atomic Energy. The existing close working relationship between Electronics Corporation of India Limited and Department of Electronics ensures the proper distribution of functions and also helps in avoiding overlap situations. A detailed exposition of the advantages of the prevailing Department of Atomic Energy—Electronics Corporation of India Limited relationship is contained in Annexure A.

[Department of Electronics No. 275 (1) | 76-DE-7.84 dated 25 August, 1976].

ANNEXURE A

A note on the need for ECIL to continue under the administrative control of DAE

- 1. The activities of Electronics Corporation of India Limited consist of design, development, production and marketing of a wide variety of electronic components, intruments and systems catering to applications in the nuclear engineering, defence, transportation, communications, industrial process control and general industry fields, closely woven into production activities is the Corporation's extensive Research and Development work involving redesinging and invovating for better and newer products, in keeping with the state-of-the-art progress in the electronics field. Of the totality of its activities, those pertaining to computers constitute only about 20 per cent.
- 2. On the other hand, the Corporation's contribution to the Department of Atomic Energy's requirements accounts for a similar magnitude, 20—25 per cent, of its activities, too. Additionally a further 20—30 per cent of the Corporation's activities are carried out in association with the Department of Atomic Energy and relate to the needs of other departments such as railway and defence. Considering the magnitude of this part, an intergal linkage with the Department of Atomic Energy's activities in the nuclear engineering field and the fields of interest to the third agencies seems no less important than that proposed by the Committee. It is well known, that Electronic Corporation of India Limited is an off-shoot of the technological innovation work carried out in Department Atomic Energy for more than a decade and has been built around a nucleus of people

actually engaged in that effort. Though after its formation, Electronics Corporation of India Limited has grown rapidly from a level of a few lakhs sales to Rs. 27 crores in 1975-76 and has achieved many development contributions of its own, there is still a continuing and increasing in-flow of technological information from Department of Atomic Energy. The following details of a few joint participation projects will highlight the close, continuing technological relationship between Department of Atomic Energy and Electronics Corporation of India Limited.

- (i) Ship-installed RADIAC System for Indian Navy.—This is an electronics instrument system for detection of nuclear fall out in ocean waters. In earlier days imported from the UK, the system was indigenised by Bhabha Atomic Research Centre with proven success. The Indian Navy requires installation of one system in each of its frigates and an order for four has been placed after successful field-testing of the first prototype. The knowhow is transferred from Bhabha Atomic Research Centre to Electronics Corporation of India Limited for manufacture. The work of transfer of knowhow and manufacture involves close liaison and exchange of design and operational feedback information between the Bhabha Atomic Research Centre engineers and Electronics Corporation of India Limited engineers. The work is of an on-going nature, with additional orders expected to follow after the first one.
- (ii) Export of Mineral Exploration Equipment.—The Atomic Minierals Division has secured orders from Iraq for mineral exploration equipment. Electronics Corporation of India Limited is to manufacture and supply these equipment, with design knowhow from Department of Atomic Energy. Similar work both for further export and for internal requirements will continue.
- (iii) Thyristor-controlled Drive for Electric Locomotives.—The Indian Railways are replacing the obsolecent excitron (mercuryarc rectifier system)—controlled drives of the 25,000 volt-AC locomotives, each having two 1400-hp motors, with solid-state thyristor-controlled drives. The excitron system is so obsolete that some of the essential parts are no longer available for import and is a major reason for the change-over. Bhabha Atomic Research Centre, together with Electronics Corporation of India Limited, with their expertise of control design for the Arvi Statellite Earth Station as well as Dehradun Station.

ventured into thyristor system design and offered a tender proposal in response to the Railway's global tender. The well-detailed proposal for an indigenous system given was attractive and stood the competition of other foreign offers as well as Bharat Heavy Electric Limited's offer based on foreign collaboration. The order is being executed and the technology is quite complex. Another similar project is in the offing, namely the chopper-controlled DC (750V)-motor drive for the Railway's Calcutta Metropolitan Transport Project.

- (iv) VT fuse.—The development of VT fuse for 25-pound gun at Bhabha Atomic Research Centre and its current production at Electronics Corporation of India Limited are already well-known to the Committee. This joint Bhabha Atomic Research Centre Electronics Corporation of India Limited work for defence is now extended to other kinds of VT fuse such as the 105-calibre (for Army) one and the 76.2 mm (Navy) one.
- tv) Tantalum anode and Bismuth, Tellurium from NFC.—For many of its pure metal requirements, such as tantalum anodes used in capacitors supplied to BEL and ITI (for defence applications) high-purity bismuth and tellurium and other special alloys, NFC of Department of Atomic Energy is the etronics Corporation of India Limited's source. This is an area of high-purity metallurgical activity where only NFC has the requisite technological appreciation of the requirements.
- 5. In developing all the projects described above and the similar projects Electronics Corporation of India Limited's engineers spent months of work at Bhabha Atomic Research Centre fro development, training, etc. Similarly Bhabha Atomic Research Centre personnel also spent considerable time at Electronics Corporation of India Limited. All this has been done without worrying about the formality of what the cost of such personnel exchange would be who would bear it and so on, and without waiting for the formality to be settled by the concerned sanctioning authorities.
- 4. The five examples quoted above are of joint activity between Department of Atomic Energy technology development centres and Electronics Corporation of India Limited for meeting vital requirements of third agencies like the Railways and the Defence. There are many other such instances of other projects, some of smaller

technological extent, some in formative stages. Besides these activities, the Department of Atomic Energy and Electronics Corporation of India Limited are closely linked in the reactor technology field itself for meeting Department of Atomic Energy's own needs such as for RAPP, MAPP, FBTR and future reactor projects such as the one begun at Narora.

- 5. In all the above activities, both the Department of Atomic Energy's as well as for other requirements, the intricacy of technology exchange and liaison is very high. A mutually receptive Research and Development culture exists between Department Atomic Energy scientists and Electronics Corporation of India Limited engineers which is high in design initiative, feedback and mutual guidance, in technology appreciation and in commitment to deliver results even under acute time-stress. This is a relationship which sees no bureaucratic or other barriers of formal procedure, it is one where the scientists and technologists on both sides keep in good continued contact as informally as though they were in the same institution. Such attunement and understanding are no doubt due to the fact of Electronics Corporation of India Limited's birth from Bhabha Atomic Research Centre, but nevertheless they have continued despite growth and change induction of personnel on both sides, resulting in an institutional understanding and appreciation. Since at the highest level on both sides, too, such understanding prevails, the technological interaction at the operational levels are free inhibitions and restraints of formal bureaucracy, a factor that is the major reason behind the quick indigenisation of complex technological projects by the Department of Atomic Energy Electronics Corporation of India Limited team. Design ideas are originated either side, mutually discussed and analysed, prototypes are developed freely using materials and facilities available whether in Department of Atomic Energy or in Electronics Corporation of India Limited, design changes in manufacture are worked out in consultation with the original designer no matter how many years have passed and new innovations are similarly incorporated. Such an interaction is the direct result of the top-level under standing arising from Electronics Corporation of India Limited's being inder the administrative control of Department of Atomic Energy.
- 6. The nuclear capability established after pains-taking effect over two decades has now become of vital importance and interest to the Government. There is a hardening of attitude on the part of other countries with which earlier, India had softer relationship in the nuclear field. This hardening has increased the pressure on the Government to attain 100 per cent, self-reliance in all technological inputs to nuclear engineering. Electronics Corporation of India

Limited is a major reservior of nuclear electronics expertise vital to the Department of Atomic Energy's efforts and has the rare development culture committed to technological self-reliance with the same seriousness as Department of Atomic Energy. The Department of Atomic Energy will require an electronics wing of the kind and own size of Electronics Corporation of India Ltd. under its own administrative control and cannot afford the long time-delay that will be involved in case it has to build up another one afresh now, should Electronics Corporation of India Limited by transferred to the Department of Electronics.

7. It is therefore considered that no change should be made to the status-quo.

Recommendation

The Committee recommend that, as indicated earlier, Government should work out a comprehensive policy for self-reliance in the computerfield mentioning in particular how the requirements for computers in the Fifth Plan, specially of mini-computers, are proposed to be met. This, it is suggested, may be laid before Parliament in a white paper within a period of six months of the presentation of this Report. There might then be a pointed and purposeful national debate on the subject.

[Sl. No. 111 (Para 7.88) of Appendix XIV to the 221st Report

of P.A.C. (Fifth Lok Sabha)]

Action taken

The recommendation is noted. A white paper will be presented to Parliament as recommended. It is suggested that this will be done within a year from now to enable an assessment of various intiatives that have already been taken.

[Department of Electronics No. 275(1)/76-DE dated 15-1-76]

CHAPTER IV

RECOMMENDATIONS/OBSERVATIONS REPLIES TO WHICH HAVE NOT BEEN ACCEPTED BY THE GOVERNMENT AND WHICH REQUIRE REITERATION

NIL

CHAPTER V

RECOMMENDATIONS/OBSERVATIONS IN RESPECT OF WHICH GOVERNMENT HAVE FURNISHED INTERIM REPLIES

Recommendation

The Committee cannot appreciate the rationale behind the decision to allow IBM and ICL an import entitlement to the tune of 85 per cent of the value of their export earnings. This concession has enabled these companies to bring in at negligible cost machines which had been out moded in advanced countries on 'As Is' basis and then to rent them out at exorbitant rates to the users here, including Government Departments. This facility has also enabled the multinationals to import punch-card systems and unit-record machines and such other items, which are obsolete elsewhere but could still be palmed off to gullible Indian users at a high margin of profit. Apart from the sharp practice involved, such transactions being in outmoded, largely superfluous and yet expensive technology which, in effects retard our own advance.

[Sl. No. 52 (Para No. 6.150) of Appendix XIV to 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

- 1. The decision regarding the import entitlement to the extent of 85 per cent of the value of export earnings of IBM/ICL was taken prior to the setting up of Department of Electronics. However, the remarks of Deptt. of Economic Affairs who examined the recommendations are given below.
- 2. The import entitlement to the extent of 85 per cent of the value of export earnings of IBM/ICL was fixed in the early sixties. The background and the circumstances leading to this decision are not fully clear to this Department. However an effort is being made to get further information. It may however be stated that after 1971 there has been no entitlement of this nature. It is not also the intention of the Government to provide an import entitlement of this type. Any import entitlement is currently related only to those imports which are actually required to facilitate the exports. It may further be added that recently the FERA application of IBM was examined by the Government. IBM had given certain proposals as a package

and one was to the effect that it could be given permission to form a wholly owned subsidiary to undertake 100 per cent exports, this proposal was subject inter-alia to the condition that IBM should get the benefit of 80 per cent import entitlement not only to cover imports required for export manufacture but also to cover imports of computer systems, etc. On this the IBM is being informed that while Government would be willing to consider proposals for formation of a wholly owned subsidiary for 100 per cent exports in terms of the normal investment policy, Government would not be agreeable to allow import entitlements of the type sought for. Company is being informed that import entitlement would be permitted only to the extent required to facilitate exports. This decision is based on the experience gained on the operation of the facility which the company was given in the early sixties.

[Department of Electronics No. 275 (1) /77-DE (Para No. 6.150) dated 17-10-1977]

Recommendation

The Committee learn that the Electronics Commission had made a review of the activities of the IBM and ICL as far back as 1971 and had come to the conclusion that "as foreign controlled companies, the activities of IBM and ICL should be so reoriented that they are concentrated either in heavily export—oriented production programme of both hardware and software and or in domestic manufacturing activities involving production on the basis of advanced technology on fully contemporary computer equipment which fulfils genuine national needs." The Committee note that the matter has been sought to be followed up since by the Department of Electronics, the Department of Economic Affairs and the Reserve Bank. In a Communication sent by the Reserve Bank to the IBM in November, 1975, it was stressed that:

- (i) The Indian branch of IBM shall be converted into an Indian company, with a non-resident interest in the equity capital not exceeding 40 per cent, within a period of 2 (two) years from the date of receipt of permission under Section 29(2) (a) read with Section 29(2) (c) of the Act.
- (ii) The manufacturing activities of the Company shall be for such capacity as is approved/recognised by the appropriate authority as on 31st December, 1973, subject to such additions or modifications as permitted upto that date by the press notes and notifications issued by the Government of India under the provisions of the Industries (Development & Regulation) Act, 1951.
- (iii) The branch shall not expand its business activities beyond the level existing on 31st December, 1973 or undertake any

new trading, commercial industrial activity without the prior approval of the Reserve Bank. Such prior approval will not be required in respect of export of goods manufactured by the branch.

(iv) IBM will submit to Government of India/Reserve Bank of India, within a period of 3 months from the date of receipt of the Bank's approval under Section 29(2)(a) of the Act, proposals relating to the taking over of the assets and liabilities of the Indian branch of IBM by the new Indian company to be floated for the taking over of the business of the branch, along with an application for issue of shares by the new company.

[Sl. No. 57(Para 6.155) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action Taken

IBM has indicated that in accordance with their international corporation strategy they would not operate in any country with even a minority equity holding of the host country. Revised proposals have been submitted by IBM and these are under consideration by Govt. Govt's basic policy is that a 100 per cent Foreign equity company may be permitted to continue only if its activities are for 100 per cent export.

[Deptt. of Electronics No. 275(1)/76-DE, (Para 6.155) dt. 22-1-77]

Recommendation

The Committee would insist that whatever proposals are put forward by IBM or ICL in compliance with the directives issued by Government or the Reserve Bank of India in pursuance of the Foreign Exchange Regulation Act. these would be scrutinised minutely by our own experts well-versed in electronics, costing etc. So as to make sure that IBM, ICL and other foreign companies are not permitted to circumvent the country's laws and that their role, if any, is permissible, should be strictly limited to export plus high technology programmes subserving the national interest.

[Sl. No. 61 (Para 6.159) of Appendix XIV to 221st Report of PAC (Fifth Lok Sabha)]

Action Taken

The applications and proposed programmes of the companies are being carefully scrutinised by experts both in the Reserve Bank and

the Department of Electronics. Government assure the Committee that the applications will be dealt with keeping in mind the requirements of the national Electronics Policy and FERA.

[Deptt. of Electronics No. 275(1)/75-DE (Para 6.159) Dt. 22-1-77]

Recommendation

The Committee attach great importance to this matter and would like to be informed as soon as some tangible decisions have been taken about IBM, ICL and other foreign companies in the field of computer industry. They would like to be satisfied that the decisions conform to the criteria hereinbefore indicated.

[Sl. No. 62 (Para 6.160) of Appethix MIV to the 221st Report of PAC (Fifth Lok Sabha)]

Action taken

The proposals submitted by both IBM and ICL for reorganisation of these business concerns in the light of Foreign Exchange Regulations Ant are under consideration and final decisions are expected to be conveyed to the two companies shortly. The Committee will be informed of the decisions as conveyed.

[Department of Electronics No. 275(1)/76-DE dated 25-8-1976]

Recommendation

The Committee find that while since August 1973 the value of capital goods imported by the IBM is being determined after loading the inter-company billing price by 350 per cent, in the case of data processing machines etc. the loading would be varied from machine to machine, depending upon what the price of that machine is in the country of export less 25 per cent, adding to it, insurance and freight. IBM has questioned the very basis of the order of loading of Intercompany prices by 350 per cent and gone up in appeal to the Appellate Collector. The Committee are informed that a settlement was reached with the company that pending judgment by the Appellate authority the customs duty would continue to be collected on the existing basis and that the company would pay the difference retrospectively if the decision went against it. The Committee have also been informed that a guarantee and bond have been then from the company to this effect. Keeping in view the huge amounts involved and the importance of resolving uncertainty in the matter, the decision by the appellate authority should be expedited. Meanwhile, the Committee suggest that the form and amount involved in the bond and the guarantee given by the IBM

should be examined by experts in the line in order to make sure of its adequacy and enforceability.

[Si. No. 66 (Para 6.164) of Appendix XIV to 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

The appeal filed by M/s. I.B.M. has since been rejected by the Appellate Collector of Customs, Bombay, vide his order No. S[49-2] 75-SVB, dated 3-8-76. M/s. I.B.M. have, however, filed a revision application before the Joint Secretary (Revision Application), Department of Revenue and Banking on 16-8-76 against the order-in-Appeal issued by the Appellate Collector.

As recommended by the Committee the form of bond has been vetted by the Ministry of Law, Branch Secretariat at Bombay.

[Department of Revenue & Banking F. No. 512/8/76-Cus-VI.]

Recommendation

The Committee are surprised that the question of similarly loading the invoices of the other multi-nationals like ICL and ICIM for the import of machinery and data processing equipment has not been finalised so far. The Committee stress that this should be done without delay.

[Sl. No. 67 (Para No. 6.165) of Appendix XIV to 221st Report]

Action taken

The question of lording the involves of I.C.L. and I.C.I.M. in respect of machinery and data processing equipments imported by them is still under consideration of the Bombay Custom House. Every effort is being made to complete the investigations expeditiously in this regard.

[Department of Revenue and Banking (F. No 512/8/76-Cus. VI)]

Recommendation

"The Committee are also unhappy about the manner of payment of drawback to these firms. Procedure regarding the determination of drawback amount envisaged verification of the fact that the Customs duty had been paid on certain components which went into the manufacturing process. The Customs authorities claimed that they were doing this verification. But Audit had questioned this claim on the ground that once the component is put in a

machine it is difficult to identify. The field officers of the Audit Party had themselves tried to identify the components going into the manufacture but they were unable to do so. As a result the Customs authorities had resorted to a cut of 30 per cent of the drawback claimed as a rule of thumb. The Board of Excise and Customs had themselves admitted that as a result of the intervention of Audity they had to re-examine the rate of drawback admissible to the IBM and as a result Rs. 33.32.560/- which sanctioned, has since been withheld. This goes to prove that the earlier claim of Customs Department that only due amount was being paid to the IBM as drawback was not correct. In the absence of physical verification of the dutypaid components into manufacture, it was learnt that the Customs authorities were depending on the certificate of the exporter which was admissible under Rule 11 of the Customs Rules. The Committee feel that the amount of Rs. 33.32 lakhs due from IBM on the ground of excess payment of drawback is not a small amount and Government should review thoroughly the entire basis and the modalities followed in determining and paying drawback so as to recover the overpayments made to both IBM and ICL on this account."

[Sl. No. 69 (Para 6.167) of Appendix XIV to the 221st Report of the P.A.C. (Fifth Lok Sabha)]

Action taken

An amount of Rs. 33,32,560.82 was determined by the Central Government as drawback due in respect of 688 machines of Card Data Recorder Type 129 Machines exported by M/s IBM. The amount has not yet been paid to the party by the Bombay Custom House and the question of over-payment does not arise. The Bombay Custom House wanted to do some further verification in view of the fact that some non-duty paid bonded materials had also been used along with the duty paid materials by the manufacturers. Government have asked the Bombay Custom House to do further verification as they deem necessary to satisfy themselves that in respect of the same materials used in machines both duty drawback and liquidation of duty liability in respect of bonded materials are not claimed.

[Department of Revenue & Banking (F. No. 2/21/76-CX-I)]

Recommendation

IBM hires its machines to customers on the basis of one time installation charges. It has been clarified by the Board of Excise and Customs that for purposes of levy of excise duty they evaluated

the various types of computers and data processing machines on the basis of list price of such machines plus "one-time installation charges". The Excise authorities also loaded the prices declared by IBM by 73 per cent on the anology of customs. But this has been appealed against by IBM. The Committee feel that the determination of the value of the products of the company should be carefully re-examined by Government so that the correct value for levy of excise duty is determined and the excise duty legitimately due is realised.

[Sl. No. 71 (Para 6.169) of Appendix XIV to the 221st Report of P.A.C. (Fifth Lok Sabha)]

Action taken

Computers and data processing machines are being manufactured by M/s I.B.M. World Trade Corpn. and M/s International Computers Indian Manufacturers Ltd. M/s I.B.M. had filed an appeal against the adjudication order passed by the Assistant Collector, which has since been rejected by the Appellate Collector of Central Excise. Bombay. They have not filed a revision application before the Government of India so far.

The other manufacturers, namely, M/s International Computers Indian Manufacturers Ltd. had filed appeals against the orders of the Assistant Collectors of Central Excise. Poona and Bangalore determining the assessable value of their products. The Appellate Collector of Central Excise, Bombay has already rejected their appeal and they have filed a version application before the Government of India. Their appeal before the Appellate Collector of Central Excise, Madras, is pending.

The question of determination of value of the computers and data processing machines, is being examined in consultation with the Cost Accounts Branch of the Deportment of Expenditure. That Department has undertaken a study and their comments in the matter are still awaited.

[Department of Revenue & Banking O.M. No. 2/21/76-CX-I]

Recommendation

In view of the fact that in respect of "AS IS" programme the contribution of IBM is only to refurbish the obsolete machines imported by them from abroad, it is most point whether this should be treated as a 'manufacturing' activity for purposes of claiming tax-credit certificate and other benefits under the Income-tax Act. The Department of Electronics were prepared to treat "AS IS" as an assembly

programme. The Department of Electronics, as pointed out earlier in this Report, had cast doubt about calling them as "genuine manufacturing activity". Another wing of the Government, viz., the Income-tax Department, had also questioned this definition and had informed the Committee that 'the entire issue whether the company's activities in India can be treated strictly as "manufacturing" will be examined in detail during the course of the re-assessment proceedings for the year 1967-68 onwards'. In view of the varying opinions expressed on the subject and the revenue implications involved the Committee feel that Government should immediately determine the correct description of the activities of these multi-nationals which will also enable a proper perception of their role from the social angle.

[S. No. 72 (Para 6.170) of Appendix XIV to 221st Report of the P.A.C. (Fifth Lok Sabha)]

Action taken

The assessments have been reopened and the matter will be examined in detail during the course of the re-assessments proceedings.

[Department of Revenue & Banking F No. 241/44 76-A& P.A.C.-1. dated 2nd August, 1976]

Recommendation

6.173. As regard, the recognition of the assessee as a company there are many areas of darkness on which in spite of the best efforts of the Committee light has not been thrown by the Board. It was stated that the IBM World Trade Corporation was recognised as a company under sub-section (6) of Section 2 of Income-tax Act 1922. The file in which this recognition was issued in 1953 was stated to be missing. Then when the question of assessment came, the IBM World Trade Corporation submitted only its branch account's results for Income-tax purposes and the Department's representatives admitted that IBM World Trade Corporation's books were not called for scrutiny. To a question whether they were in possession of the Company's World Balance Sheet, the reply was in the affirmative. If so, it is intriguing how the proper allocation of expenses were not made and it was left to the assessee to come forward with a "Voluntary" disclosure of head office expenses which were claimed and allowed in spite of their being excessive and suspect. It is obvious that the Income-tax department has been adopting an attitude almost of throwing up its hands while dealing with IBM World Corporation, possibly under the impression that they could not call

companies. To a question whether Rule 10 of the Income-tax rules applied in this case, the witness replied that since the Branch balance sheet was available it was not necessary to resort to Rule 10. This is, to put it mildly, following the line of least resistance. The Committee are not satisfied with the Ministry's reply. The Income-tax Department was not even apparently aware of the fact that IBM World Trade Corporation which had obtained recognition as a company had split into two subsidiary Corporations, viz. IBM World Trade America/Far East Corporation and IBM World Trade Europe Middle East Africa Corporation. To a question about this division the Department's reply is as follows:

"As the parent company i.e., IBM World Trade continues as such, without any change in name or form, the question of fresh recognition of the branch of the company does not arise."

6.173. It is not clear from this reply whether the Indian activity alone remained with IBM World Trade Corporation and not transferred to the Far Eastern subsidiary. However, the Committee find from the Company's Annual Report of 1974 that the Indian Branch as managed by the Far Eastern subsidiary. It is therefore surprising that the Ministry should say that the original certificate issued far back in 1953 to the IBM World Trade Corporation would continue to apply to the branch.

[Sl. Nos. 74 & 75 (Paras 6.172 & 6.173) of Appendix XIV to the 22(st Report of PAC (Fifth Lok Sabha)]

Action taken

Kind attention of the Committee is invited to Department of Revenue & Banking reply dated 18-6-76 to para No. 3.34 of 187th Report from F. No. 236/274/73-A&PAC.II.

[Department of Revenue & Banking F. No. 241/37/76-A&PAC-I F. No. 500/14/76-FTD, dated the 29th July, 1986]

Recommendation

It is on record that substantial additions had to be made by the Income-tax authorities in the returns, submitted by IBM during the years 1967-68 to 1973-74. The major addition was on account of excessive development rebates claimed by the company which were not allowed by the Income Tax Officer. The Committee however note that relief was subsequently granted by the Appilate Assistant Com-

missioner. The Tribunal also did not uphold the Government's stand. However, the Department has filed an application before the Bombay High Court. The Committee urge Government to pursue the matter before the court conclusively. Besides the development rebate, there were certain other additions made by the Income-tax Officer which were acquiesced in by the assessees. The Committee would like Government to examine whether these additions attract the provisions relating to concealment and if so the necessary penalties should be imposed and recovered.

[S. No. 76 (Para 6.174) of Appendix XIV to the 221st Report of the PAC (Fifth Lok Sabha)]

Action taken

It is reported that the additions to the total income which were acquiesced in by the assessee, were all made on the basis of information on record furnished by the assessee. In the circumstances, it cannot be held that the assessee concealed the particulars of income or furnished inaccurate particulars thereof to attract the penal provisions of the Act.

[Department of Revenue & Banking F. No. 241/38/76-A&PAC-I dated the 27-7-76]

Recommendation

The Committee also find a serious lacuna in the Income Tax law viz., section 33(1) (a). According to the Board of Direct Taxes development rebate was permissible on second hand machinery under certain circumstances namely that such machinery or plant was not used in India at any time previous to the date on such installation. No wonder IBM had claimed development rebate on the "AS IS" machineries imported by them. It has been admitted by the Department of Electronics that all that was done to these "AS IS" machines was "to assemble them". Therefore, to regard this activity as manufacture and to allow Development Rebate on machines given even on rentals is something which appears to be not in consonance with the objectives underlying this rebate.

[S No 77 (Para 6.175) of Appendix XIV to 221st Report of the PAC (Fifth Lok Sabha)]

Action taken

The allowance of development rebate in this case was in accordance with the provisions of Section 33(1A)(b) and 34 of the Incometax Act. 1961 read with Rule 5A(b) of the Incometax Rules, 1962. The question whether development rebate is admissible on data pro-

cessing machines, is in dispute and at present the matter is before the Bombay High Court in a Departmental Reference. However, development rebate has been withdrawn in respect of plant and machinery installed after 31-5-75 barring exceptional cases referred to in S. 16 of the Finance Act, 1974.

[Department of Revenue & Banking F. No. 241/39/76-A&PAC-I F. No. 228/29/76-IT (A.II) dated the 2-8-76]

Recommendation

The Committee note that IBM had been given provisional tax credit certificates for Rs. 34.74 lakhs under Section 280(z)(b) for manufacturing items included in the first schedule of the Industries Development and Regulation Act. But it is astonishing that in giving such certificates the income arising from rentals was also taken into consideration. The Committee are glad that the assessments for the years 1967-68 to 1970-71 for which tax credit certificates have been previously given are now going to be reopened and the correct amount of certificate admissible would be finally determined during the course of the re-assessment proceedings. The Committee, however, feel that this was a serious lapse and the circumstances in which such certificate was given in respect of income arising from rentals should be investigated and responsibility fixed.

[S. No. 80 (Para 6.178) of Appendix XIV to 221st Report of P.A.C (Fifth Lok Sabha)].

Action taken

It is respectfully submitted that the tax credit certificates u/s 280-ZB issued were provisional. The correct amount of tax credit allowable will be ascertained and allowed while completing the reopened assessments.

[Department of Revenue & Banking F. No. 241/43 76-A& P.A.C-I dated the 31st July, 1976].

Recommendation

The Inter-ministerial Working Group which was appointed on the suggestion made by the Comptroller and Auditor General of India that Government should go into the cost and the rates of return on which IBM had determined the high rates of prices for their machines, had come to the conclusion that there is prima facie case for reduction in rates charged by IBM and ICL to the extent of 25 per cent to 30 per cent. The Inter-ministerial Working Group had also recommended that the Department of Electronics might discuss with IBM and ICL regarding further steps to reduce the prices with effect from 2109 LS—12.

January 1969. The Committee are not aware of the results, if any, of these negotiations. Information in this matter should without delay be made available.

[Sl. ..o. 84 (Para 6.182) of Appendix XIV to the 221st Report of P.A.C (Fifth Lok Sabha)].

Action taken

Arising out of discussions held by the Inter-Ministerial Working Group with IBM and ICL, these companies have put forward a consolidated proposal in response to the requirements under FERA, outlining certain terms for transfer of ownership of machines currently hired out by them to various users. The IBM proposal is for an outright sale of all machines, currently rented out to the customers, on the basis of capitalisation of rentals over a period of time. Such terms have been offered as part of a package which not only takes into account the upward price revision by the company at the time of devaluation in 1966 arising out of rentals being in Indian rupees against contracts entered in dollars but also certain other matters relating to customs duties. Inter-Company Billing Prices (ICBP) etc. which are outstanding between IBM and Government. Whilst the offer of IBM indicates a certain appreciation on their part of Government's concern about the high rates for their machines, the matter is still under consideration of Government for a final settlement. The ICL proposal is for closing down of the hundred per cent foreign equity operations of ICL, and transfer of machines held on rentals by ICL to the International Computers India Manufacturing Ltd. (ICIM) which will be re-structured with 40 per cent minority foreign equity; there was no upward price revision by ICL at the time of devaluation in 1966. The transfer is to be effected on the basis of payments to ICL(I) (whether already paid, or remains to be paid at the time of transfer) of 70 per cent of the established hire for a period of 10 years for computers and 7 years for conventional equipment from the original date of installation. This proposal is also under consideration of Government.

[Deptt. of Electronics No. 275(1)/76-DE dated 10-11-1976]

New Delhi; November 16, 1977. Kartika 25, 1899 (S).

C. M. STEPHEN, Chairman.

Public Accounts Committee.

APPENDIX

Main Conclusions/Recommendations

S. No.	Para No.	Ainistry/Department concerned	Recommendation
I	2	3	
ī.	1.4	Electronics	The Committee expect that final replies to those recommenda-
		Revenue and Banking	tions/observations in respect of which only interim replies have so far been furnished will be made available to them expeditiously after getting them vetted by Audit.
2.	1.16	-do-	The Committee appreciate the promptness with which the Department of Electronics have taken action on the various recommendations/observations made by the Committee. The Committee would like to commend the various steps taken by the Department, in the light of the Committee's observations to streamline the procedure for indenting and procurement of computers in the overall national interest.
3.	1·17	-d ₀ -	The Committee note with satisfaction that guidelines for determining areas of priority in usage of computers whilst clearing various proposals for their imports have been adumbrated by the Department of Electronics and a policy paper in this regard will be drawn

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4.	1.18	Electronics	
5.	1·19	-do-	
6.	I · 20	Electronics	

Home Affairs

up by the Department with the approval of the Electronics Commission soon.

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The Committee have noted the assurances given by the Department of Electronics that endeavour will be made to carry out studies/field projects with regard to quantification of benefits accruing from computers from time to time. Now that an Inter-Ministerial committee has been constituted to study, inter alia this particular matter in depth, they hope that it would be possible for the Department to quantify in concrete terms the benefits accruing to the major users of the computers.

The Committee have noted the observation of the Department of Electronics that the question of regulation of introduction of computers above a certain value in the private sector that may be obtained through indigenous sources is being studied by the Government. The Committee would like these studies to be expedited and clear policy laid down and publicised for the guidance of all concerned.

The Committee note that the inter-ministerial committee, which has been set up by the Department of Electronics. would also make recommendations on the nature of facilities to be set up for census operations and census data management. However, they cannot

7. 1.31 Electronics

help expressing their deep concern that not much use has so far been made about the vast data that have already been collected with the help of the computer in the office of the Registrar General of India (Census). The Committee would like the Government to take conclusive action in consultation with other concerned authorities to put to effective use the voluminous data collected by the Registrar General of Census. They feel that it is of the utmost importance not only to collate the information but also to publicise it for the benefit of researchers, social scientists and universities. The Department of Electronics should also determine well in advance the nature and extent of computerisation that would be necessary for the Census organisation before the commencement of the next Census in 1981 so that most suitable and economic arrangements could be made.

The Committee are glad that the Department of Electronics are by and large in agreement with the findings of the Committee in regard to the loopholes which are prevalent in the system of hiring, purchase and utilisation of computers and other data processing equipment. as high-lighted in paragraph 3.95 of the Report. The Committee note that, on the basis of the Cabinet decision, policy guidelines for import of computers have been issued. According to these guidelines, each user will outline the application for which a computer system has to be obtained through import and the Department of Electronics will scrutinise such applications in terms of national priorities as laid down by the Electronics Commission

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from time to time. After the need for the import computer system with a certain functional configuration has been established, the Department will obtain competitive sealed tenders from various manufacturers agents. The Committee feel that this is a step in the right direction and will eliminate unjustifiable proliferation of computers/data processing equipment by the user Departments. The Committee desire that the guidelines should also be brought to the notice of all the user Departments.

The Committee would like that the Department of Electronics should include in their Annual Reports the details of all the proposals which have been cleared by them for the import of computers/data processing equipments costing Rs. 5 lakhs and over.

The Committee note that the Department of Electronics propose to conduct a study on a generalised basis on the rationale for purchase/hire of systems taking into account such aspects as manufacturers' rates of rental and sale prices, purchasers' rate of return in investment, etc. and broad guidelines on the subject will be evolved. The Committee would like to be apprised of the details and results of such a study.

As regards the scrutiny of the terms of hire with IBM and ICL, the Committee have been informed that the Inter-Ministerial Working Group on Computers has held negotiations during 1976

8. I.32 Electronics

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10. 1·34 -do-

with IBM with regard to conversion of hire agreements with users into outright sale. The Committee would like to know the details of the agreements that have been reached with IBM as also ICL in regard to the computers which have been hired out to the user Departments.

It is a matter of satisfaction that the Department of Electronics have assured to the Committee that examples of the type quoted by the Public Accounts Committee will not recur.

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The Committee note with satisfaction that Government have constituted an Expert Committee with broad terms of reference to collect detailed information concerning installation and utilisation of electronic data processing equipment acquired by various Government departments and to suggest concrete measures to bring about efficient working, rationalisation and economy. As regards the delay in the setting up of the expert body, the Committee note the Government's point of view that "since very many aspects of computerisation in Government departments were being investigated in considerable depth and a large amount of evidence was being collected by the Public Accounts Committee, Government considered it more advisable to await the conclusion of the investigation and the findings by the Public Accounts Committee so that any indepth study by the Expert Committee may be more purposeful in terms of the findings of the Public Accounts Committee." The Committee, however, have not been informed about the time

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			by which the Expert Committee would complete its work and submit its report. The Committee would like to be informed about the findings of the Expert Committee and the action taken in pursuance thereof in due course.
13.	1·47	Electronics	The Committee would like Government to lay down early the parametres and guidelines for assessing the extent to which computers/data processing equipment system have proved beneficial with reference to cost, labour displacement etc., so that the review could be carried out annually and necessary follow-up action taken.
14.	1.48	-do-	The Committee suggest that the highlights of this review should also be suitably incorporated not only in the Annual Reports of the Ministries/Departments/Government Organisations concerned, but also in a consolidated manner in the Annual Report of the Department of Electronics.
15.	1 · 49	-do-	The Committee attach considerable importance to the training of staff and the provision of other infrastructure to support computer installations. The Committee would like to be informed about the details that are being worked out by the Department of Electronics to ensure these objectives and the actual progress made

in imparting training.

6. 1·50 -do-

The Committee note that the Regional Computer Centre at Calcutta would serve the needs of various users in the Calcutta region for various applications related to industry, trade and production. The Committee also note that Government contemplate to set up a National Informatics Centre at Delhi. The Committee would like to be apprised about the details of the working of the proposed Centres with particular reference to cost aspects, methodologies, facilities to be provided, etc. utilisation of capacity in terms of percentage. They would also like to be apprised about the action taken and results achieved in pursuance of discussions being held with the Systems Groups responsible for planning and implementation of computer based information and decision making systems in various Ministries and Departments.

17. 1·57 -do-

The Committee are glad that, as per their suggestion Government have set up an Inter-Ministerial Standing Committee on Security with specific terms of reference. One of the reference of this Committee is to consider whether technological devices could be installed straightaway on the imported computer system working in the sensitive departments so that no risks are taken with data security. The Committee stress that this aspect should receive the highest priority and a start should be made to instal, with the help of local computer engineers, hardware and software keys on systems hired or purchased from foreign multinational corporations.

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18. 1	·58	8 Home Affairs	The Committee note that no specific instructions have been issued by the Ministry of Home Affairs on data security in the case of computers installed in various Ministries/Departments. The Committee would like the Ministry of Home Affairs to draw up in consultation with the Department of Electronics, suitable guidelines to be observed by all Ministries/Departments in the matter of data security. There should be regular programme of inspection of Computer Sections in the various Ministries/Departments and the reports of the Inspecting Officers should be processed by the Security Cell being set up in the Computer Directorate of the Department of Electronics, with a view to plugging all loopholes in the interest of security.		
19.	1.84	Electronics	The Committee note with satisfaction that the question of prices/rentals charged by the multinational companies has been referred to the inter-Ministerial Committee and, based on their findings, necessary action will be taken by Government for conversion of hire into purchase. The Committee desire that Government should consider the offer made by IBM for outright sale of the machines at present on hire in all its aspects and arrive at a decision which would be in the best public interest.		
2 0.	1.	-do-	The Committee are glad that the Government have accepted the observations of the Committee in regard to the remittances		

liability that arose out of the operations of IBM and ICL in India.

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23. 1·88 Electronics

Revenue & Banking

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The Committee hope that a constant watch would be kept so as to ensure that the compannes as restructured operate in such a manner that the foreign exchange outgo will be on a reduced scale and will be commensurate with our national policies.

The Committee note that the IBM have indicated that in accordance with the international corporation strategy they would not operate in any country with even a minority equity holding of the host country. The Committee desire that the revised proposal submitted by the IBM in this regard should be examined in all its ramifications and an early decision taken keeping in view the national interests as also the requirements of the Foreign Exchange Regulation Act.

The Committee have learnt with satisfaction that the programmes of 'As Is' manufacture have been phased out and that plans are afoot for setting up of regional computer centres which would take over the functions now being performed by the Service Bureaus operated by the multi-nationals.

In their 221st Report, the Committee regretted that the Department had not satisfactorily sxplained the observations made by the Committee in their 127th Report (5th Lok Sabha) that there was a serious difference in the prices shown by IBM for Customs in the import documents and those claimed by them from Railway Administration. The Committee had also in the same Report regretted the inability of the Central Board of Excise and Customs to

furnish information about the purchase price paid by Government Departments on items imported by IBM and ICL and the actual value of these articles declared to Customs at the time of importation by the suppliers. It is surprising that the Department of Revenue and Banking have again expressed their inability to furnish the information on the plea that the actual import value of data processing machines could not be collected from the Customs Houses for want of relevant details. The Committee cannot but express their unhappiness over the failure of the Department to collect the relevant data. However, the Committee note that their observations on wide scale under-invoicing by IBM have not been countered.

24. 1.89 Electronics

Revenue & Banking

In regard to the payment of drawback to IBM, the Committee learn that an amount of Rs. 33.32 lakhs has not yet been paid to the party by the Bombay Custom House and a further verification is under way by the Bombay Customs in order "to satisfy themselves that in respect of the same materials used in machines both duty drawback and liquidation of duty liability in respect of bonded materials are not claimed."

25. I·90 -do-

The Committee note that an amount of Rs. 33.32 lakhs was determined by the Central Government as drawback due in respect of 688 machines of Card Data Recorded Type 129 machines exported

by IBM. The amount was held over pending verification whether some non-duty paid bonded materials had also been used along with the duty paid materials by the manufacturers. The Committee feel that apart from thoroughly investigating this aspect Government/Custom House should also go into the question of Rs. 77.70 lakhs which have already been paid to IBM as a drawback on exports to make sure that no irregularities have occurred therein. The Committee would like a similar exercise to be done in respect of other multi-national manufacturers, viz. ICL etc. who may have been given drawback on similar grounds.

The Committee further note that the Appellate Assistant Commissioner had granted relief to the IBM on account of development rebates claimed by the company which was not allowed by the Income-tax Officer earlier. It has been stated that the Department had filed an application before the Bombay High Court in this respect. The Committee would like to know the decision of the Bombay High Court in this case.

The Committee are not satisfied with the explanations offered by the Department of Revenue and Banking in regard to allowance of depreciation on various business assets of IBM and ICL. The Government have not conducted a detailed examination, as suggested by the Committee, to find out the extent of excess depreciation that might have been allowed to IBM and ICL. The Committee would like to be apprised of the actual position in this regard. In

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			particular, they would like to know the total depreciation claimed by IBM and ICL and the amount that was actually allowed to them as also the amount disallowed.
28.	1.93	Electronics	The Committee are glad that Government have accepted their
		Revenue & Banking	suggestion that development rebates should be construed as an incentive to develop industries in India and this should not be frittered away by way of dividends or repatriation. It is a matter of satisfaction that development rebate has been withdrawn in respect of plant and machinery installed after 31 May, 1974 barring exceptional cases referred to in Section 16 of the Finance Act, 1974.
29.	1.94	-do-	While the Committee appreciate that the assessment of returns of income in respect of IBM, a giant company, has now been entrusted to an Inspecting Assistant Commissioner of Income-tax at Bombay, they are unhappy that no enquiry appears to have been made to fix responsibility for the initial lapse, viz. assessment of income-tax of IBM pertaining to the years 1964-65 to 1973-74 by an officer of the rank of Income-tax Officer. The Committee would like to stress that the constraints of manpower should not be a cause for relegating the work of assessment of income of big companies of the world standing like IBM of junior officers.
3 0.	1.95	Electronics	The Committee learn that the offers made by IBM and ICL, in regard to the transfer of ownership of the machines currently

hired out by them to various users are under consideration and the modalities of such transfers are being worked out. The Committee would like to be informed about the outcome of the negotiations.

The Committee are glad that with a view to attaining selfsufficiency in the field of computers, the Department of Electronics are endeavouring to approve of industrial licences in the case of a number of agencies in the small scale as well as in the organised sectors for indigenous production of computer hardware. The Committee have stressed time and again the need for keeping a check on the role of the multinationals in so far as the computer development or programming is concerned. There cannot be two opinions that the multinationals, which have been aptly described as 'new leviathans with an international existence of their own', dominate the commanding heights of computer industry. It is a matter of common knowledge that in the particular case of electronic computers, the IBM has nearly a world monopoly. The Committee note that the Department of Electronics are maintaining a close watch on the programmes of the multinationals and the role of such companies "is maintained and controlled, particularly through the provisions of Foreign Exchange Regulations Act to ensure that they are not in commanding positions in this field."

In this context, the Committee also welcome the decision of the Department of Electronics to open a number of centres for software development with a view to develop software for export purposes as well as meeting the country's requirements.

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32 1·120 -do-

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33	I · I2I	Electronics	The Committee note that the Department of Electronics propose to conduct a review of the calculator industry which was licensed in 1972. The Committee would like to be informed about the results of the review and the action taken in pursuance thereof.
34	1 122	-do-	The Committee would also like to be informed in due course of the strides made towards the introduction of a new computer system of the ICL 2903/2904 series to be manufactured by the International Computers Indian Manufacture Ltd. which is proposed to be converted into a 60 per cent majority Indian company after amalgamation with the present 100 per cent (UK) Equity Co., ICL (India).
35	1 · 123	-do-	The Committee note the steps being taken by the Department for setting up of Semi-conductor Complex for manufacturing large scale integraded circuits indigenously. The Committee desire that the site for the Complex should be decided upon without further delay so that a start is made for the proper functioning of Semi-conductor Complex.
36	I·12 4	-do-	While noting the steps taken by the Government for creating the necessary infra-structure for the production of computers as also creating right climate for the export of India-made computers, the Committee urge that a White Paper outlining Government policy and performance in the field of computerisation should be

presented to Parliament as early as possible but not later than the end of 1978 so that the Members and the public have an opportunity to express their views and give suggestions for achieving a breakthrough in this important technological field.